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ABSTRACT

This document is part 2 of the workbook for grade 6 pupils in the Comprehensive Instructional Management System, a unified mathematics curriculum for kindergarten through grade 7. Each objective is developed by a variety of strategies, with mastery of objectives diagnosed through a testing component. The activities in the student workbook are designed to provide practice in mastering the performance objectives, following the sequence in the teacher's manual. Ninety-two performance objectives are included in this part of the grade 6 workbook, designed to develop: computational skills with whole numbers, fractions, decimals, and integers; geometric skills; number concepts; and other mathematical topics. (MNS)

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COMPREHENSIVE INSTRUCTIONAL MANAGEMENT SYSTEM

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A Cyclical Mathematics Curriculum



Workbook Part 2

NEW YORK CITY BOARD OF EDUCATION
OFFICE OF CURRICULUM DEVELOPMENT AND SUPPORT
DIVISION OF CURRICULUM & INSTRUCTION

SE 045 528

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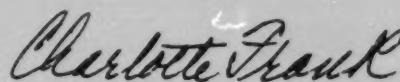
FOREWORD

The Comprehensive Instructional Management System (CIMS) is a unified mathematics curriculum for grades K-7. The curriculum is cyclical in design, and reflects the most recent New York City and New York State guidelines.

Utilizing the experience of our system's teachers, we have developed a teacher-designed curriculum that includes a rich selection of classroom-tested successful mathematics activities. The major goal of the CIMS mathematics project is to provide the classroom teacher with a well-structured, objective-based curriculum. All objectives are supported by a variety of strategies. Student mastery of these objectives is readily diagnosed through the system's testing component.

The curriculum format is structured to allow the teacher to determine the ability level of the students in the topic under study, and to permit the students to move forward at their individual rates. Each module of instruction provides the teacher with a set of related performance objectives. These objectives are supported by activities which probe and develop the students' readiness to undertake new skills and concepts. Further reinforcement is given to mastery of the objectives through accompanying student workbooks.

It is hoped that this curriculum will not only assist teachers in developing vital mathematics instruction, but will serve to expand and enrich students' mathematics skills.



Charlotte Frank,
Executive Director
Division of Curriculum and Instruction

ACKNOWLEDGMENTS

The Comprehensive Instructional Management System (CIMS) was developed as a project of the Division of Curriculum and Instruction, Charlotte Frank, Executive Director. Dr. Peter Negroni, Community School Superintendent CSD 12; Dr. Harvey Garner, Community School Superintendent CSD 18; Carlos Edwards, Community School Superintendent CSD 23, and Joseph Pacheco, Community School Superintendent CSD 32 supervised the overall development of the CIMS program within their respective districts.

Morris Freedman, Director of the Office of Curriculum Development and Support; Irwin Kaufman, Director of Mathematics; Kenneth Bates, Director of CIMS; Maria DeSalvio, Assistant Director of Mathematics; Arthur Flug and Doreen Genkin, Assistant Directors of CIMS and Gene Menchini, Program Manager, Distributive Systems, Office of Data Processing Coordination provided overall supervision of this project.

Division of Special Education

Overall supervision of curriculum in addressing those students with special needs was coordinated by Edward M. Sermier, Chief Administrator, Division of Special Education.

Allan Dobrin, Office of Chief Administrator; Bebe Bernstein, Administrator, Curriculum Development Unit of the Office of Program Development and Geraldine Silver and Susan Wieder, Special Education Coordinators provided guidance and support in addressing these special needs.

Consultants

The program consultants responsible for reviewing the curriculum for mathematics accuracy were:

Harry Ruderman, Assistant Principal Supervision, Mathematics, Hunter College
High School (Retired)

Helene Silverman, Associate Professor, Lehman College

Principal Writers

The principal writers responsible for planning the scope, sequence and engaging in the necessary research in writing of the modules were:

Stephen Rappaport, Assistant Principal I.S. 171K

Sara Jane Bass, CIMS Curriculum Leader

Judith Fein, CIMS Curriculum Leader

Lorraine Wan, CIMS Curriculum Leader

Rochelle Watnick, CIMS Curriculum Leader

CIMS District Curriculum Workshops

Each of the participating CIMS community school districts organized a curriculum workshop to write the various curriculum levels.

Community School District 12

Mary J. Teshara	District Mathematics Coordinator
Valentin Acabeo	C.S. 134X
James F. Gilligan	I.S. 116X
Selma Gunther	C.S. 50X
Betty Anne Jackson	C.S. 47X
Mark Lehrer	I.S. 158X
Jewel R. Moolenaar	I.S. 143X
Marcia Ann Rudnitsky	C.S. 102X
Marcy Dale Stecker	C.S. 47X
Ira K. Victor	C.S. 77X
Leonard Zavlick	C.S. 92X

Community School District 18

Jack Friedman	CSD 18, Director CIMS
Selma Mitlitsky	District Mathematics Coordinator
Eileen Backer	P.S. 135K
Lillian Frechtman	P.S. 279K
Merle Glass	P.S. 219K
Howard Mankes	P.S. 219K
Lillian Pecker	J.H.S. 252K
Virginia Pero	J.H.S. 211K
Carol J. Reale	P.S. 235K
Arlie Solola	J.H.S. 252K
Renee M. Tardi	P.S. 219K

Community School District 23

Wallace Dimson, District Mathematics Coordinator

Gloria Allen
 Marshall Belson P.S. 183K
 Abraham Butensky P.S. 165K
 Janice Ellenbogen P.S. 298K
 Ruth Fennell P.S. 298K
 Gladys H. Galamison P.S. 156K
 Bruce Landau P.S. 327K
 George McMullen P.S. 183K
 Carmella Murden J.H.S. 275K
 Martha Hilinski-Pepe P.S. 327K
 Rochelle Sanders P.S. 327K
 Gary Wexler P.S. 41K
 Priscilla A. Williams I.S. 271K
 Frederick Zwibel P.S. 184K

Community School District 32

Aurora Larocca, District Mathematics Coordinator

Pedro J. Colon J.H.S. 111K
 Dorothy A. Conroy P.S. 116K
 Joan Fox P.S. 116K
 Steven Ganzell I.S. 291K
 Akhtar A. Khan I.S. 291K
 Lenore Marie Messina P.S. 151K
 Joanne Narisi P.S. 299K
 George Silverglad P.S. 274K
 Norma Warmund P.S. 45K
 Stephen Elliot Weiss P.S. 274K
 Martin Weissman P.S. 384K

Citywide Curriculum Developers

Judy Z. Cohen	Corr. Math. N.P.S.	Carmen B. Matthews	CSD 3 J.H.S. 88M
Nancy R. Coleman	CSD 19 Staff Dev.	Edythe Ogin	CSD 19 I.S. 171K
Carl Conetta	Special Ed. Bronx	Joseph A. Porzio	CSD 19 Staff Dev.
Gerri T. Dunne	Corr. Math. N.P.S.	Fred Remer	CSD 6 Math Coord.
Meryl Glass	CSD 22 P.S. 139K	Jon Rothfeld	CSD 19 Staff Dev.
David A. Gold	CSD 19 Staff Dev.	Marvin Schneider	Edward R. Murrow H.S.
Stuart Goldberg	CSD 19 Staff Dev.	Leila Schwartz	Corr. Math. N.P.S.
Michelle Greenberg	CSD 28 P.S. 160Q	Angelina Spero	Corr. Math. N.P.S.
Joyce Jalowski	Corr. Math. N.P.S.	Martin L. Spiro	CSD 19 I.S. 302
Margaret Jordan	Corr. Math. N.P.S.	Bernice Staub	Corr. Math. N.P.S.
Jeffrey Joyce	CSD 15 I.S. 88K	Madeline Sussman	CSD 1 P.S. 142M
Nicholas C. Leo	Corr. Math. N.P.S.	Robert B. Weiss	CSD 28 J.H.S. 190Q
Elaine J. Kaplan	CSD 28 J.H.S. 157Q	Bernice Zuckerman	CSD 19 Staff Dev.
Joan Mahon	CSD 19 Staff Dev.		

Citywide Curriculum Illustrators

Joyce Abramowitz	CSD 26 J.H.S. 158Q	Edward Kissane	Beach Channel H.S.
Amy Appleman	CSD 22 P.S. 194K	Susan M. Seidler	Corr. Math. N.P.S.
Paula J. Blanes	CSD 15 P.S. 39K	Dolores Soldo	Special Ed. Brooklyn
Nina Cucchiari	Special Ed. Bronx	Sandy Susser	Special Ed. Bronx
Charles B. Flisser	Special Ed. Bronx		

Citywide Curriculum Editors

Meryl Fenster	CSD 30 P.S. 171K	Laura J. Lederman	CSD 26 J.H.S. 158Q
Robert Greenman	James Madison H.S.	Mary Newsom-King	CSD 8 J.H.S. 101X
Stephanie Lang-Goldsmith	Special Ed. Queens	Lorraine Wittman	CSD 25 P.S. 169Q

Production Staff

Anne Cohen, Education Analyst
 Dorothy Johnson, Office Associate

To The Teacher:

The activities in the CIMS student workbook are designed to provide the pupils with practice in mastering the curriculum's performance objectives and follows the sequence of the CIMS teacher's manual. Each workbook activity page lists the corresponding performance objective number in the upper left hand corner. The activity page numbers are identical to those found in the CIMS teacher's manual.

To The Student:

This student workbook has been designed to help you build a strong knowledge of mathematics. All of the material was created by teachers experienced in mathematics. As you use this workbook, you will find yourself progressing from basic ideas to more advanced skills. The workbooks will provide practice in mastering these skills.

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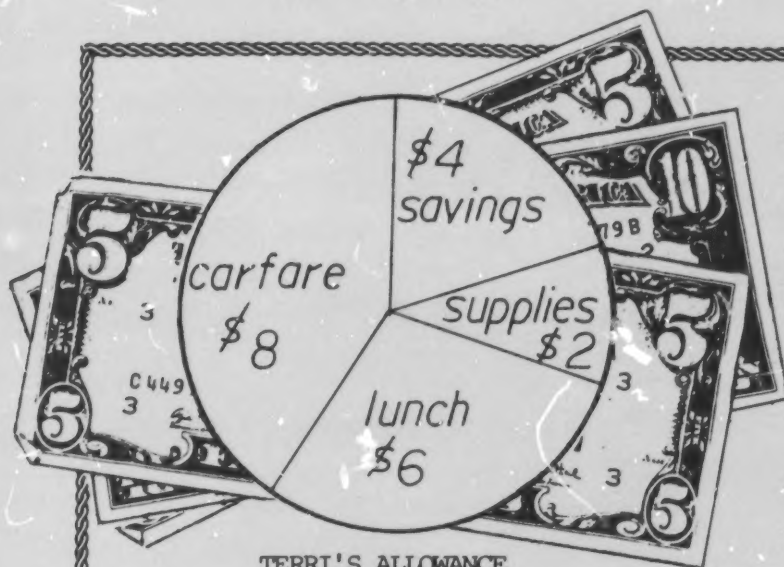
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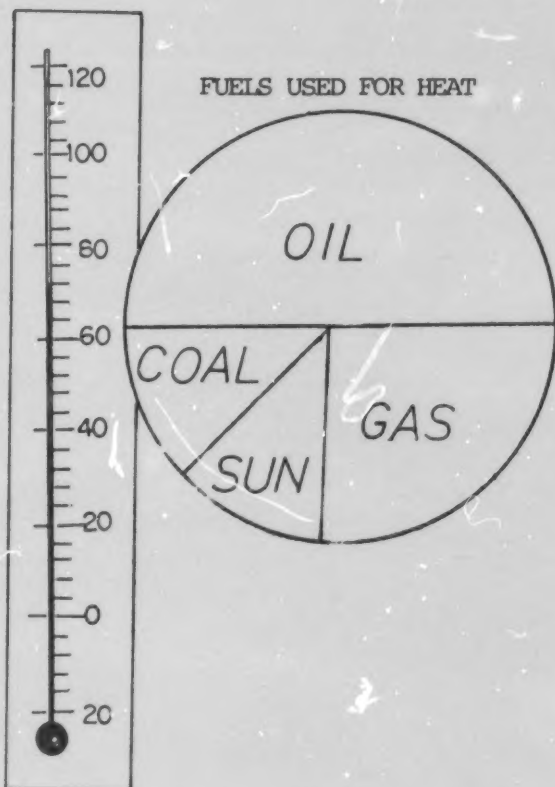
NAME: _____ CLASS: _____ DATE: _____

Interpret the circle graphs.



Terri's allowance is \$20.00
what part does she spend
on each item?

Item	Amount	Part	-
Carefare	\$8	$\frac{8}{20} = \frac{2}{5}$	



What part comes from oil? _____

What part comes from gas? _____

What part comes from coal? _____

What part comes from sun? _____

- C. Look for a circle graph in a magazine or newspaper.
Bring it to class for discussion.

P.O. 6.12.01.02

NAME: _____ CLASS: _____ DATE: _____

Read the table. Construct a graph from the table.

One day James recorded the temperature. He made a table of the information he received.

Time	Degree Celsius
9 am	8°
12 Noon	12°
3 pm	20°
6 pm	16°
9 pm	4°

What graph did you use?

Why?

NAME: _____ CLASS: _____ DATE: _____
Solve the problems.

- 1) Bob can climb 30 steps a minute. How many hours will it take him to climb 3600 steps?

Solution:

Step 1:

$$30 \times 60 = 1800 \text{ steps per hour}$$

Step 2:

$$1800 \overline{) 3600} \quad \text{Answer} = \underline{2 \text{ hours}}$$

- 2) Jim can rope one steer every 5 minutes. How many steer can he rope in 2 hours?

Answer: _____

- 3) Tyrone is buying a video game player for \$169.75. He pays the store \$100 for the machine now and he will pay off the rest in three monthly installments. How much will Tyrone pay each month?

Answer: _____

- 4) Tom drove 96 miles in 3 hours and Jane drove 108 miles in 4 hours. Who averaged the greater speed? By how much?

Answer: _____

- 5) The local supermarket is selling 6 ears of corn for \$.99 on sale. Corn usually sells for 20¢ an ear. If you buy a dozen ears of corn on sale, how much will you save?

Answer: _____



P.O. 6.07.05.01

NAME: _____ CLASS: _____ DATE: _____

Solve.

$$\begin{array}{r} 9437 \\ + \underline{.4216} \end{array}$$

$$\begin{array}{r} .8531 \\ + \underline{.4232} \end{array}$$

$$\begin{array}{r} .7550 \\ + \underline{.3775} \end{array}$$

$$\begin{array}{r} .5921 \\ + \underline{0835} \end{array}$$

$$\begin{array}{r} .1276 \\ + \underline{.5772} \end{array}$$

$$\begin{array}{r} .4282 \\ + \underline{.5331} \end{array}$$

$$\begin{array}{r} .0642 \\ + \underline{.8510} \end{array}$$

$$\begin{array}{r} .1526 \\ + \underline{.4438} \end{array}$$

$$\begin{array}{r} .3112 \\ + \underline{.0758} \end{array}$$

$$\begin{array}{r} .8905 \\ + \underline{.1299} \end{array}$$

$$\begin{array}{r} .7108 \\ + \underline{.9333} \end{array}$$

$$\begin{array}{r} .8251 \\ + \underline{.9037} \end{array}$$

NAME: _____ CLASS: _____ DATE: _____

Read each problem. Estimate each answer.
Solve the problem.

- 1) The thickness of a board is .0371 meters. This is .014 meters less than it is supposed to be. How thick is it supposed to be?

- 2) A machinist has a bar 4.2517 inches wide, another bar that is 3.7826 inches wide. What is the combined width of the two bars?

- 3) Box A. weighs 1.4217 pounds. Box B weighs 3.261 pounds, Box C weighs 2.5003 pounds.
 - a) What is the combined weight of box A and B?
 - b) What is the weight of all 3 boxes?

- 4) An opening in an engine part is supposed to be 1.1500 inches. The part is acceptable if the opening is as much as .0755 in. larger or smaller than what it is supposed to be. What is the largest opening that would be acceptable?
Smallest opening that would be acceptable?

NAME: _____ CLASS: _____ DATE: _____

Subtract. Remember to line up the decimal places and the decimal points. Check your answers. Fill in the missing digits.

$$\begin{array}{r} 1. \quad 0.9 \\ - 0.3 \\ \hline \end{array}$$

$$\begin{array}{r} 2. \quad 0.91 \\ - 0.60 \\ \hline \end{array}$$

$$\begin{array}{r} 3. \quad 4.62.00 \\ - 0.00.74 \\ \hline \end{array}$$

$$4. \quad 3.9 - 0.2 =$$

$$5. \quad 0.8253 - 0.125 =$$

$$\begin{array}{r} 6. \quad 0.91 \\ - 0.09 \\ \hline \end{array}$$

$$\begin{array}{r} 7. \quad 84.900 \\ - 0.006 \\ \hline \end{array}$$

$$\begin{array}{r} 8. \quad 0.97500 \\ - 0.46103 \\ \hline \end{array}$$

$$\begin{array}{r} 9. \quad 52.00 \\ - 0.76 \\ \hline \end{array}$$

NAME: _____ CLASS: _____ DATE: _____

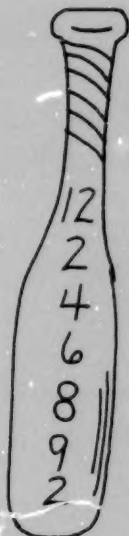
Diane and Pete are learning to play tennis.
Solve each problem.

- 1) Diane's first lesson cost \$8.50. She gave the teacher \$10.00. How much change did she receive?
- 2) Pete paid 18.65 for his racket. Katy paid 13.82. How much more did Pete pay for his racket?
- 3) Diane's tennis serve was clocked at 30.845 miles an hour. Pete's serve was clocked at 28.2346 miles an hour. How much faster is Diane's serve?
- 4) Pete paid \$4.27 for tennis balls \$3.25 for socks, and \$1.47 for wrist bands. He gave the cashier \$10.00. How much change did he receive?
- 5) After her lesson, Diane paid \$2.65 for a hamburger and a glass of milk. The hamburger cost 2.10. How much did the milk cost?

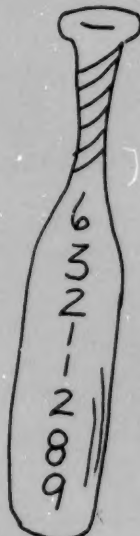


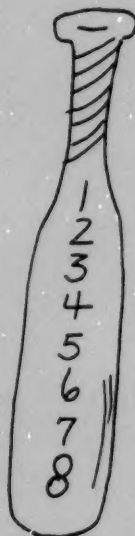
NAME: _____ CLASS: _____ DATE: _____

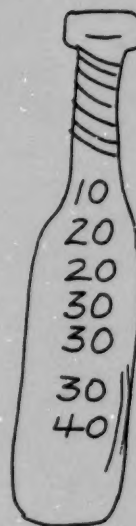
Find the mode for each set of data.
Write "no mode" when applicable.

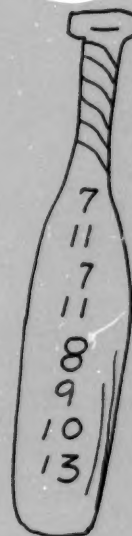


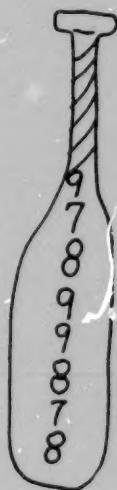
Mode = _____



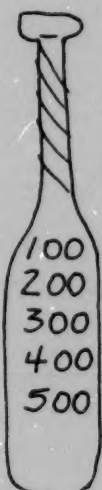


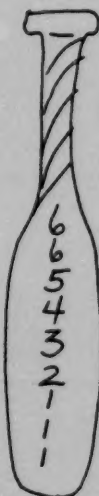




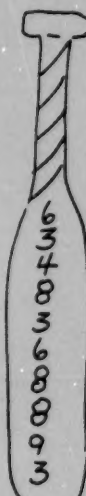


Mode = _____









NAME: _____

CLASS: _____

DATE: _____

Rank each set of numbers from lowest to highest.
Circle the median of each set.

{4, 2, 7}

2, 4, 7 Median = 4.

{9, 1, 6, 5

1, 5, 6, 9} Median = 5.5

{9, 1, 6, 5}

1, 5, 6, 9 Median = 5.5

{75, 65, 80

40, 95, 80}

{4, 4, 2, 1, 3, 9, 9}

{18, 26, 4, 39, 18, 5, 40, 18}

{65, 65, 50, 45, 60,

70, 70, 70, 55, 90}

{16, 20, 9, 8,

16, 21, 20, 16, 8}

{85, 70, 70, 70, 75, 75, 75, 60, 65, 65,

80, 85, 90, 90, 100}

{3, 3, 2, 1, 4, 6, 5, 7, 7, 7, 1, 2, 2, 78, 9, 10, 10}

NAME: _____ CLASS: _____ DATE: _____

Use the data and find the mode, mean and median.

I. Test Scores:

75, 45, 60, 90, 75, 75, 70, 85

II. Daily earnings:

\$30.00, \$25.00, \$35.00 \$40.00 \$25.00, \$20.00

III. Runs scored in Sunday baseball games

11, 2, 3, 5, 6, 0, 7, 8, 3, 4, 4, 3, 5

IV. Rainfall

3.5", 2.6", 4.8", 3.5", 2.7"

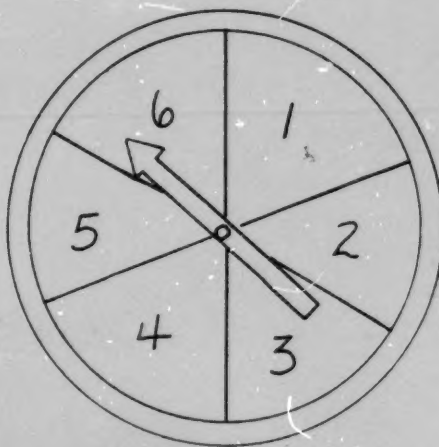
NAME: _____ CLASS: _____ DATE: _____

- I. Fill in the missing word(s)
II. Match the letter to the numeral.

- I.
1. Tossing a coin is an example of an _____.
 2. 6 coming up on a single roll of a die is called an _____.
 3. Any group of possible outcomes is called an _____.
 4. Events in which one event has no influences or another are called _____.
 5. A listing of all possible outcomes in an experiment is called a _____.

II.

- | | |
|--|-----------------------|
| _____ 6) Spinning the spinner 50 times to see what numbers come up. | a) sample space |
| _____ 7) (1), (2), (3), (4), (5), (6) | b) Outcome |
| _____ 8) 3 coming up on the first spin does not influence 3 or any other numbers coming up on the next spin. | c) experiment |
| _____ 9) 6 comes up on a spin. | d) event |
| _____ 10) Any of the numbers coming up on a spin. | e) independent events |



NAME: _____ CLASS: _____ DATE: _____

- I. Construct a sample space for tossing a die three times then list all possible outcomes.
- II. Construct a sample space for spinning the spinner twice. List all possible outcomes.

POSSIBLE OUTCOMES



number
of
tosses

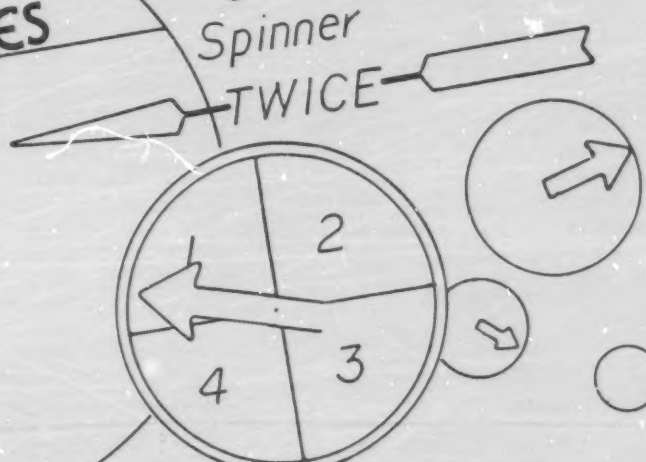
1						
2						
3						
	1	2	3	4	5	6

face of die

Tossing
a die
three times

POSSIBLE OUTCOMES

Spinning
a
Spinner
TWICE



NAME: _____ CLASS: _____ DATE: _____

Fill in each blank.



LIST ALL POSSIBLE OUTCOMES.

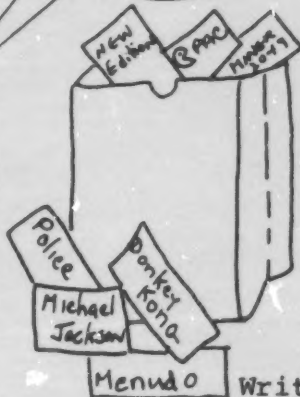
FIND EACH PROBABILITY.

- A. $P(\text{Valentina})$ _____
- B. $P(\text{Edgar})$ _____
- C. $P(\text{girl's name})$ _____
- D. $P(\text{boy's name})$ _____
- E. $P(\text{name that begins with C})$ _____

FILL IN
EACH BLANK

Construct a sample space for the experiment.
Fill in each blank.

The Williams family is going to buy one new record album and one new video game. They couldn't agree on a choice so each of the four children wrote their choices for records and video games on pieces of paper. The four choices for each were placed into two separate bags.



Write the probability that the choice will be the following:

1. Donkey Kong and Police _____
2. New Edition and Miner 2049er _____
3. Michael Jackson and Pac Man _____
4. Meundo and Donkey Kong _____

NAME: _____ CLASS: _____ DATE: _____

Construct a circle given each radius.



1.5 inches

4 cm

3 cm

2.5 cm

1 cm

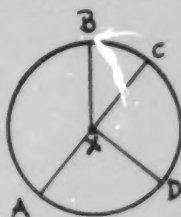
.5 in



NAME: _____ CLASS: _____ DATE: _____

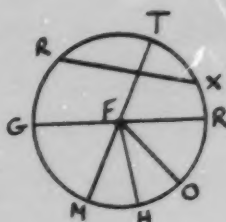
- I. List the names of all the radii and diameters in the circle.
 II. Fill in the chart.

I.



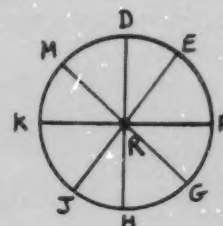
Radii BX

Diameter _____



Radii _____

Diameter _____



Radii _____

Diameter _____

II.

Length of the radius

- 1) 6 cm
- 2) 8m
- 3) 12 m
- 4) _____
- 5) _____

Length of the diameter

- 12 cm
- _____
- _____
- 14 m
- 8 cm

NAME: _____ CLASS: _____ DATE: _____

Match the diameters with the circumference.

Diameter

A. 1400 cm

B. 302 cm

C. 28 cm

D. 6 cm

E. 56.2 cm

F. 20 cm

G. 9. cm

H. 56 cm

Circumference

1. 175.84 cm

2. 18.84 cm

3. 62.8 cm

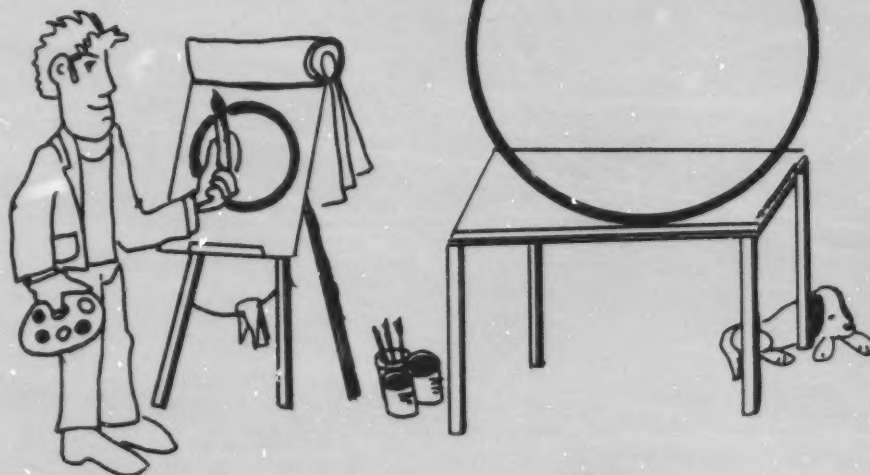
4. 176.47 cm

5. 948.28 cm

6. 87.92 cm

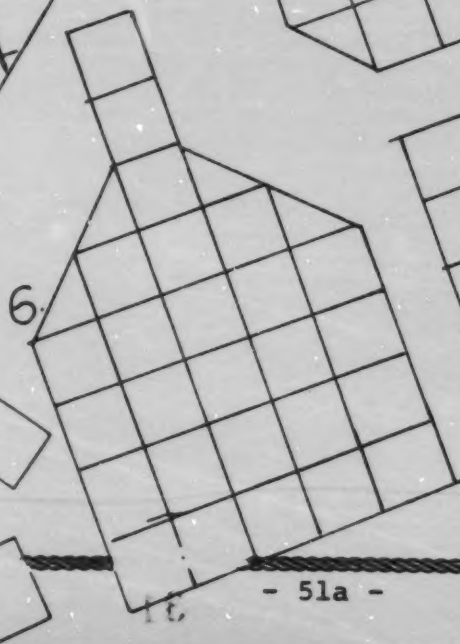
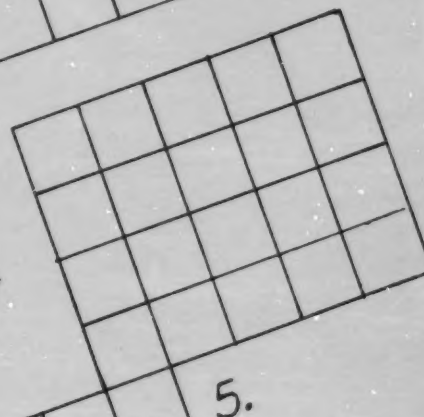
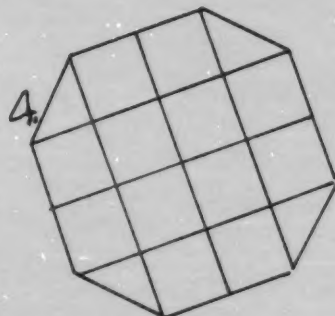
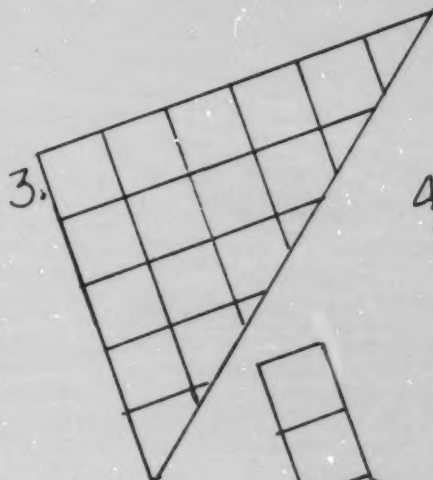
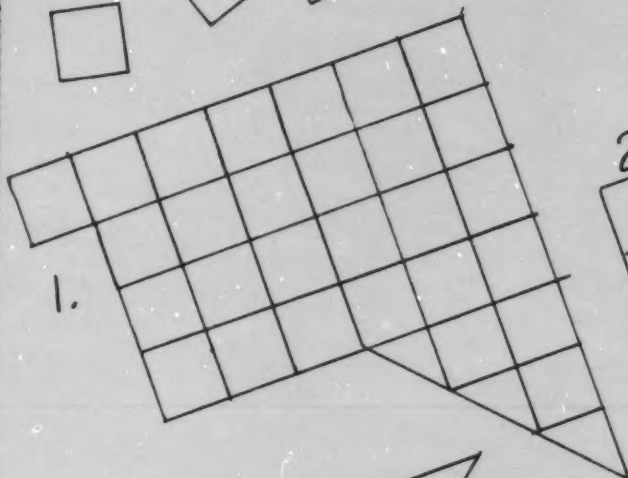
7. 28.26 cm

8. 4396 cm

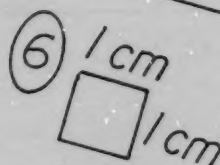
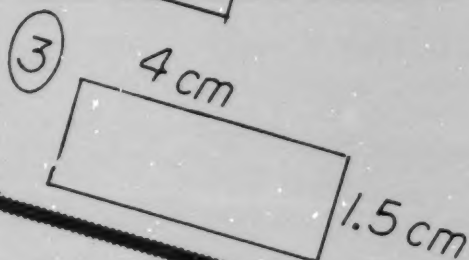
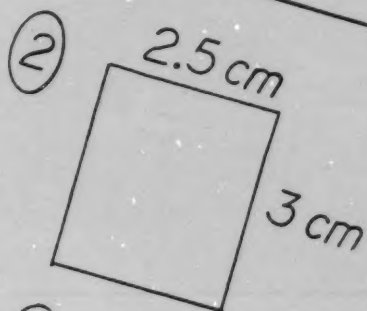
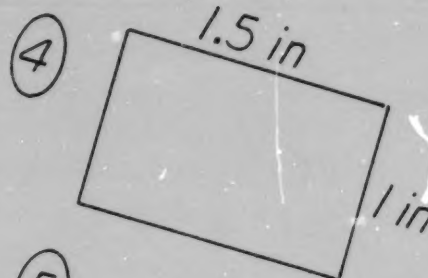
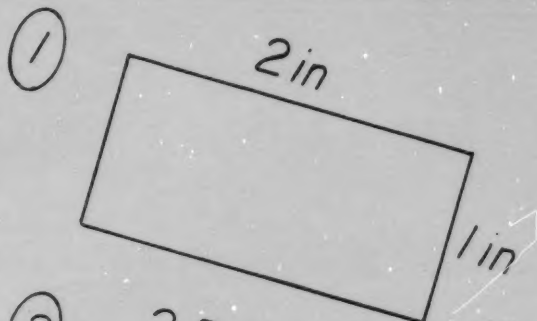


NAME: _____ CLASS: _____ DATE: _____

Find the area of each figure by counting the units.



NAME: _____ CLASS: _____ DATE: _____

Find the area of each rectangle.

⑦ $L = 9\text{ m}$
 $W = 4\text{ m}$

⑧ $L = 3.76\text{ cm}$
 $W = 1.8\text{ cm}$

⑨ $L = 67.3\text{ yd}$
 $W = 15.8\text{ yd}$

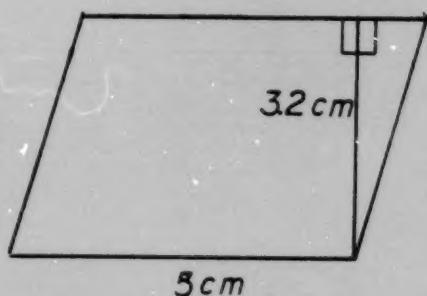
⑩ $L = 1.7\text{ m}$
 $W = 2.3\text{ m}$



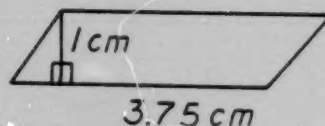
NAME: _____ CLASS: _____ DATE: _____

Find the area of each parallelogram and each triangle.

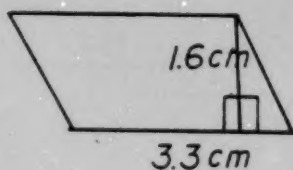
1.



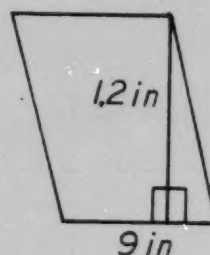
2.



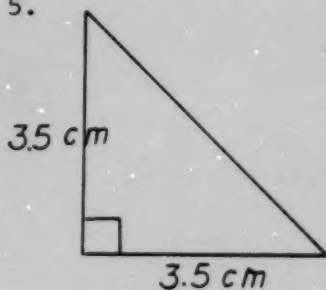
3.



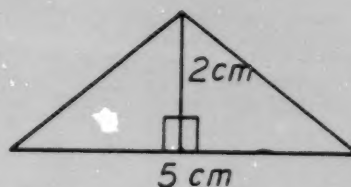
4.



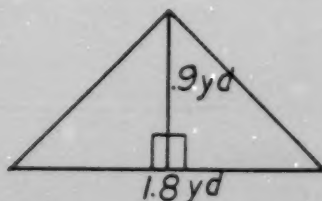
5.



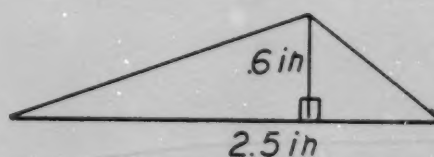
6.



7.



8.



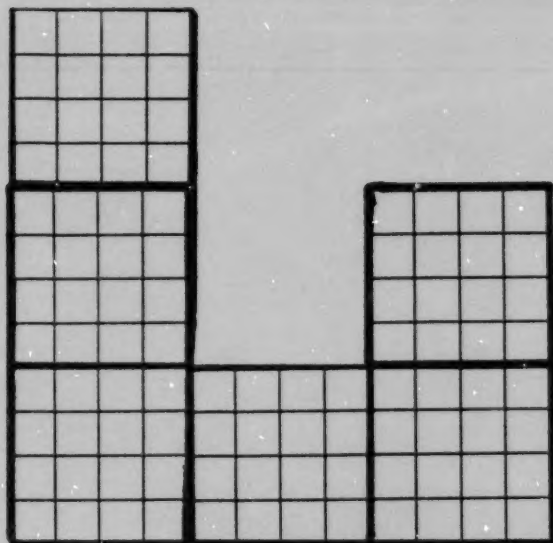
115

NAME: _____

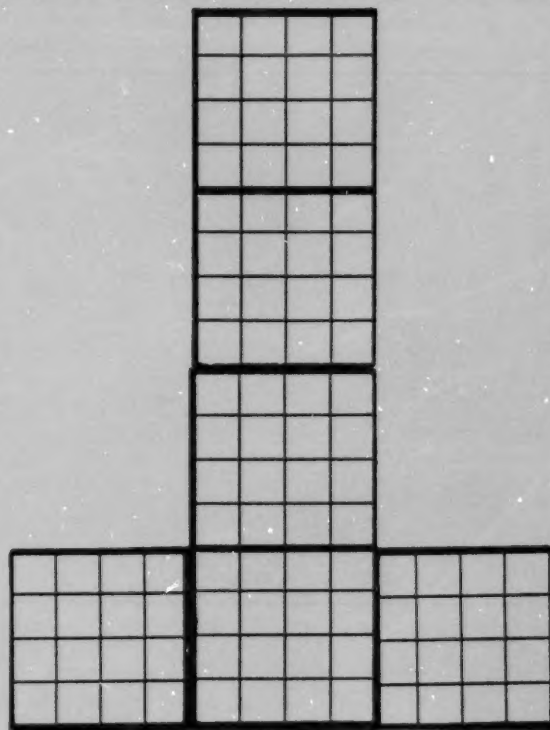
CLASS: _____

DATE: _____

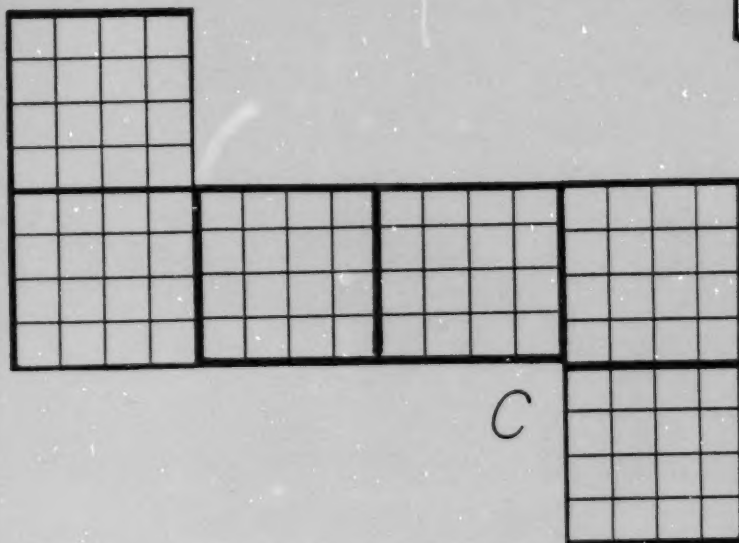
Look at each pattern. Write the word "cube" next to the letter of each figure which will form a cube. Prove your answer by tracing, folding and cutting the cube pattern.



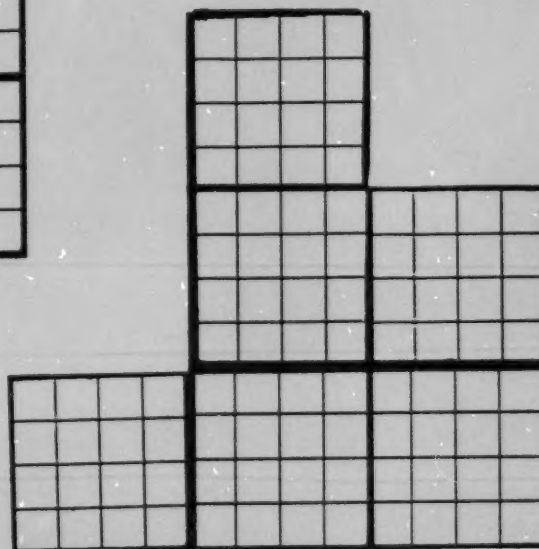
A



B



C

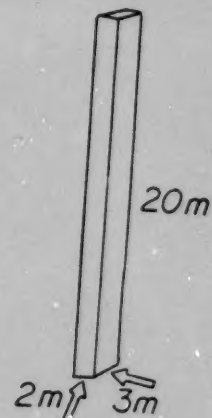
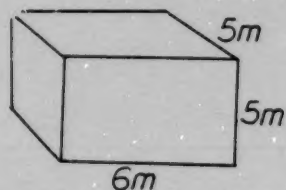
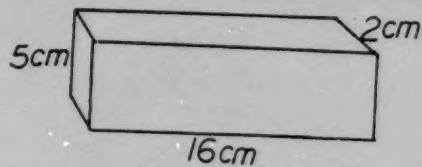
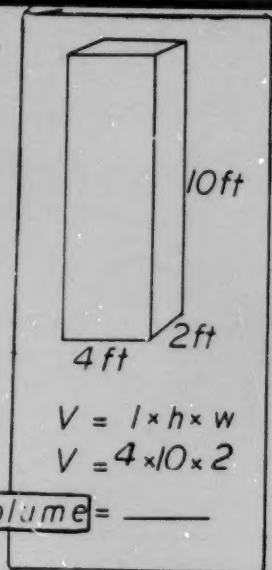


D

NAME: _____ CLASS: _____ DATE: _____

- I. Find the volume of each rectangular prism
 II. Using the measurements given, find the volume.
 Use the work space for your computations.

I.



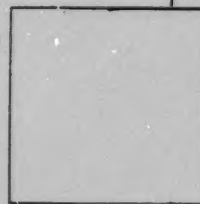
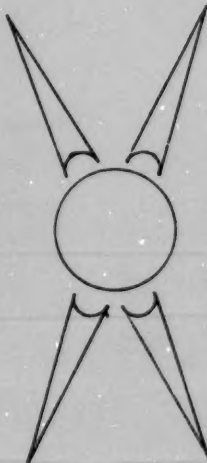
II.

$L = 10 \text{ cm}$
 $H = 15 \text{ cm}$
 $W = 12 \text{ cm}$

V = _____

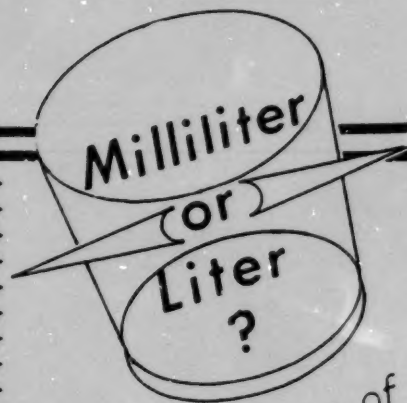
$L = 9 \text{ m}$
 $H = 10 \text{ m}$
 $W = 11 \text{ m}$

V = _____



NAME: _____ CLASS: _____ DATE: _____

Which would you use
to measure these cylinders?



A small can of orange juice. *ml. or l.?*

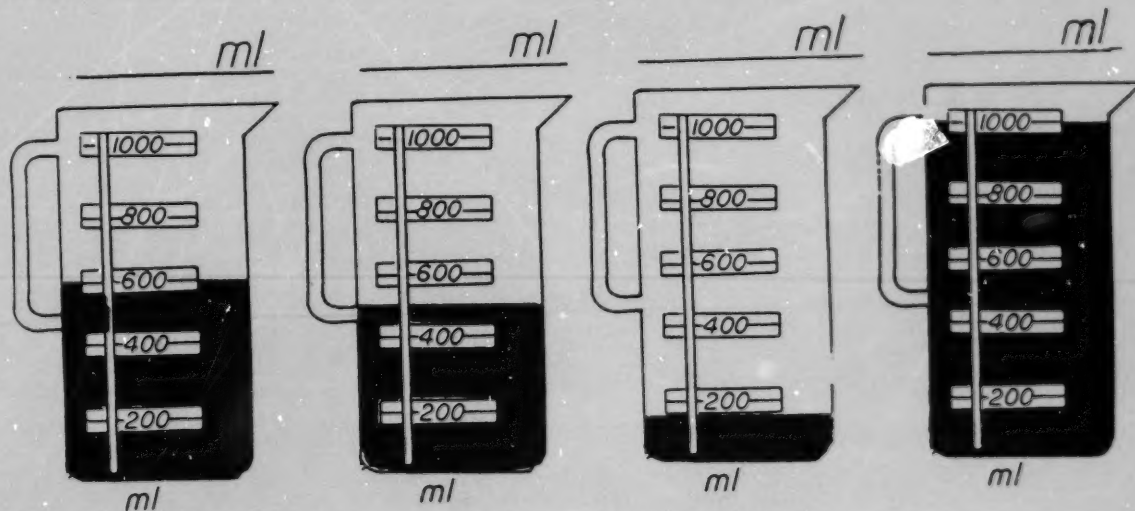
A round aquarium. *ml or l?*

The tank which holds gas for the car. *ml or l?*

A large can of fruit punch. *ml or l?*



Read each measurement:



NAME: _____ CLASS: _____ DATE: _____

- I. Read each problem. Finish the chart.
 II. Construct a chart to solve the problem.

I.

1. How long will it take Mario's Pizzeria to earn \$90,000, if it earns \$15,000 per month.

Month	Jan	Feb			
Total Earnings	\$15,000	\$30,000			

2. How many votes did David and Nicole receive if they both received the same amount?

Class Election	
Name	Votes
John	9
Michelle	7
Tonia	3
David	
Nicole	
Total	35

- II. John, Paul, Nicole and Carmen are running for class President. Thirty five votes are cast in the class elections. John receives five votes. Nicole receives three times as many votes as John. Paul receives one-third as many votes as Nicole.

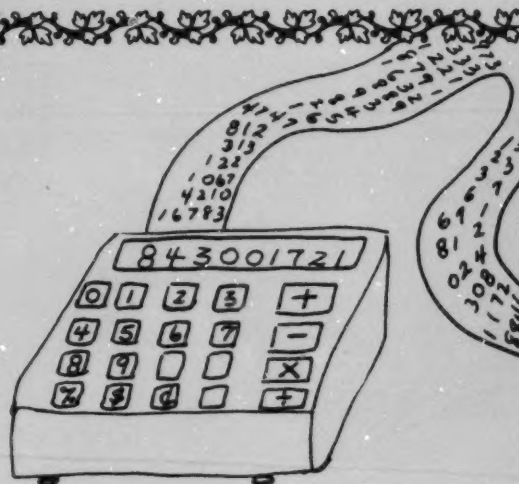
- a) How many votes did each candidate receive?
 b) Who won the election?

NAME: _____ CLASS: _____ DATE: _____

Estimate each sum by rounding. Then add.
Check each answer.

Example:

$$\begin{array}{r} 90,871 \\ 8,672,014 \\ 46,136 \\ \hline 8,809,021 \end{array}$$



1.

$$\begin{array}{r} 59,183,672 \\ 26,008,341 \\ + \quad 8,112,346 \\ \hline \end{array}$$

2.

$$\begin{array}{r} 7,419 \\ 106,395 \\ \hline 205,111 \end{array}$$

3.

$$\begin{array}{r} 6,748,396 \\ 13,287,115 \\ \hline 9,235,897 \end{array}$$

4.

$$\begin{array}{r} 216,128 \\ 12,135 \\ \hline 6,295,198 \end{array}$$

5.

$$\begin{array}{r} 183,167 \\ 11,335 \\ + 2,345,967 \\ \hline \end{array}$$

NAME: _____ CLASS: _____ DATE: _____

Solve.

1. The Happy Town Bank has three branches. At branch 1, \$63,182,111 worth of loans were given out in April. Branch 2 gave \$14,382,195 and branch 3 gave \$174,209,362. How much money did the Happy Town Bank given in April?

2. Glovertown, U.S.A. imported 67,382,116 tons of coral in January. In February, the town imported 85,112,346 tons and in March 95,116 tons were imported. How much coal was imported in the three months.

3. The Fun In The Sun Airlines has four airplanes. Last year, the milage for each plane was;

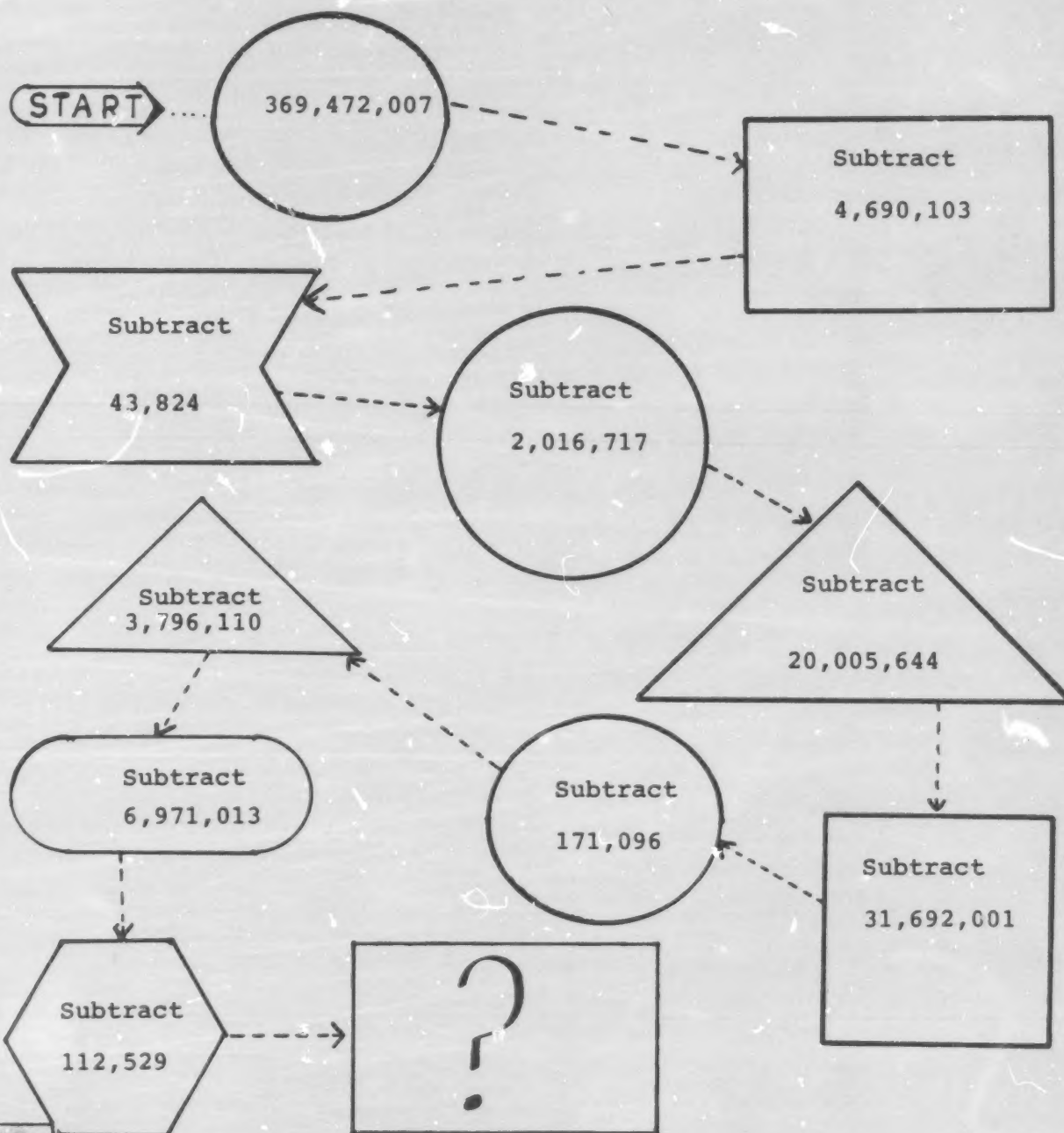
Aruba Airplane - 67,382,459
Puerto Rico Pilot - 68,304,906
West Indian Wings - 126, 345, 189
Trinidad Tornado - 45,631,280

What was the total milage of the four airplanes?

4. On the Fourth of July, there were 2,179,862 people at the beach on Coney Island and 1,872,401 people at Jones Beach. How many people were there at both beaches?



CAN YOU REACH YOUR DESTINATION?



NAME: _____

Class: _____

Date: _____

Write a number sentence and an estimation and solve each problem.

1. An actor was paid \$2,483,215 to appear in a movie. An actress was paid \$3,259,176 to appear in the same movie, what is the difference in their salaries?

2. In 1970 the population of the United States was 183,465,217. In 1980 the population was 239,179,329. What was the population increase from 1970 to 1980?

3. A hamburger fast-food chain begins the month of March with 769,215 hamburgers in its freezer. During the month 135,298 hamburgers are shipped out to stores. How many hamburgers are left?

4. There are 978,215 students attending New York City Public Schools. A snowy December day 345,216 students were present in NYC public schools. How many students were absent?

5. The sun is 92,868,414 miles from the earth in summer and 93,114,216 miles from the earth in winter. How much further away is the sun from the earth in winter than in the summer?

NAME: _____ CLASS: _____ DATE: _____

I. FILL IN THE MISSING NUMBER.

II. PLACE THE BAR OVER THE PROPER ROMAN NUMERAL(S).

I.

1. $\overline{V}$ = 1000 x 5
2. $\overline{XII}$ = 1000 x _____
3. $\overline{LX}$ = _____ x 60
4. $\overline{XVII}$ = 1000 x 10 + _____
5. $\overline{D}$ = 1000 x _____
6. $\overline{XD}$ = 1000 x _____ + 500
7. $\overline{M}$ = 1000 x _____
8. $\overline{IV}$ = _____ x 4
9. $\overline{CLX}$ = 1000 x _____ + 60
10. $\overline{CI}$ = 1000 x 100 + _____

II.

11. 5,003 = $\overline{VIII}$
12. 10,100 = XC
13. 150,000 = CL
14. 50,500 = LD
15. 90,000 = XC
16. 40,000 = XL
17. 100,050 = $\overline{CL}$
18. 9,000 = IX
19. 4,000 = IV
20. 400,000 = CD



NAME: _____

CLASS: _____

DATE: _____

Decipher the message by converting the Roman numeral to the Arabic numeral and fill in the correct letter.

$\frac{A}{75,000}$	$\frac{B}{32}$	$\frac{C}{6,945}$	$\frac{D}{112}$	$\frac{E}{3,280}$	$\frac{F}{67,001}$	$\frac{G}{52}$	$\frac{H}{60}$	$\frac{I}{6,000}$	$\frac{J}{19}$	$\frac{K}{25,000}$	$\frac{L}{1,875}$	$\frac{M}{18}$
$\frac{N}{45}$	$\frac{O}{10,000}$	$\frac{P}{32,111}$	$\frac{Q}{65}$	$\frac{R}{9,000}$	$\frac{S}{39,999}$	$\frac{T}{495}$	$\frac{U}{2,452}$	$\frac{V}{21}$	$\frac{W}{1,942}$	$\frac{X}{999}$	$\frac{Y}{16}$	$\frac{Z}{672}$

MCMXLII - LX - MMMCCLXXX - $\overline{IX}$ - MMMCCLXXX

$\overline{LXVIII}$ - $\overline{X}$ - $\overline{IX}$

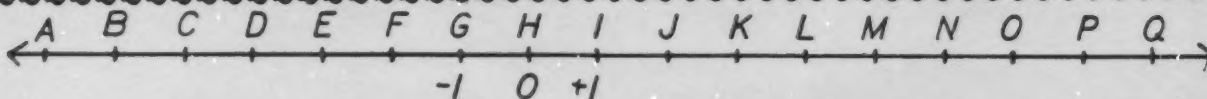
$\overline{LXXV}$ - $\overline{IX}$ - CDXCV

CDXCV - LX - $\overline{X}$ - MMCDLII

$\overline{IX}$ - $\overline{X}$ - XVIII - MMMCCLXXX - $\overline{X}$?

Write the message here: _____

NAME: _____ CLASS: _____ DATE: _____



1. Write the letter of these points on the number line

+ 6 is pt. _____

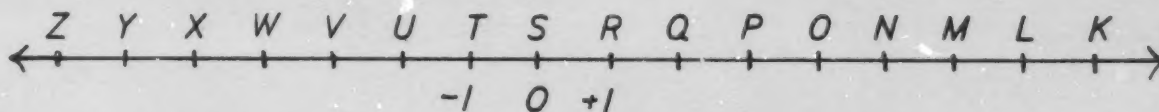
+ 7 is pt. _____

- 4 is pt. _____

- 2 is pt. _____

- 7 is pt. _____

+ 3 is pt. _____



2. Write the point for each letter, on the number line

pt. M is _____

pt. N is _____

pt. X is _____

pt. Z is _____

pt. Y is _____

pt. U is _____

3. Write the opposites

a) +3 -3 _____

g) - 1 _____

m) -8 _____

b) - 20 _____

h) + 4 _____

n) + 18 _____

c) - 28 _____

i) + 16 _____

o) + 7 _____

d) + 1 _____

j) + 20 _____

p) - 12 _____

e) - 6 _____

k) + 6 _____

q) + 13 _____

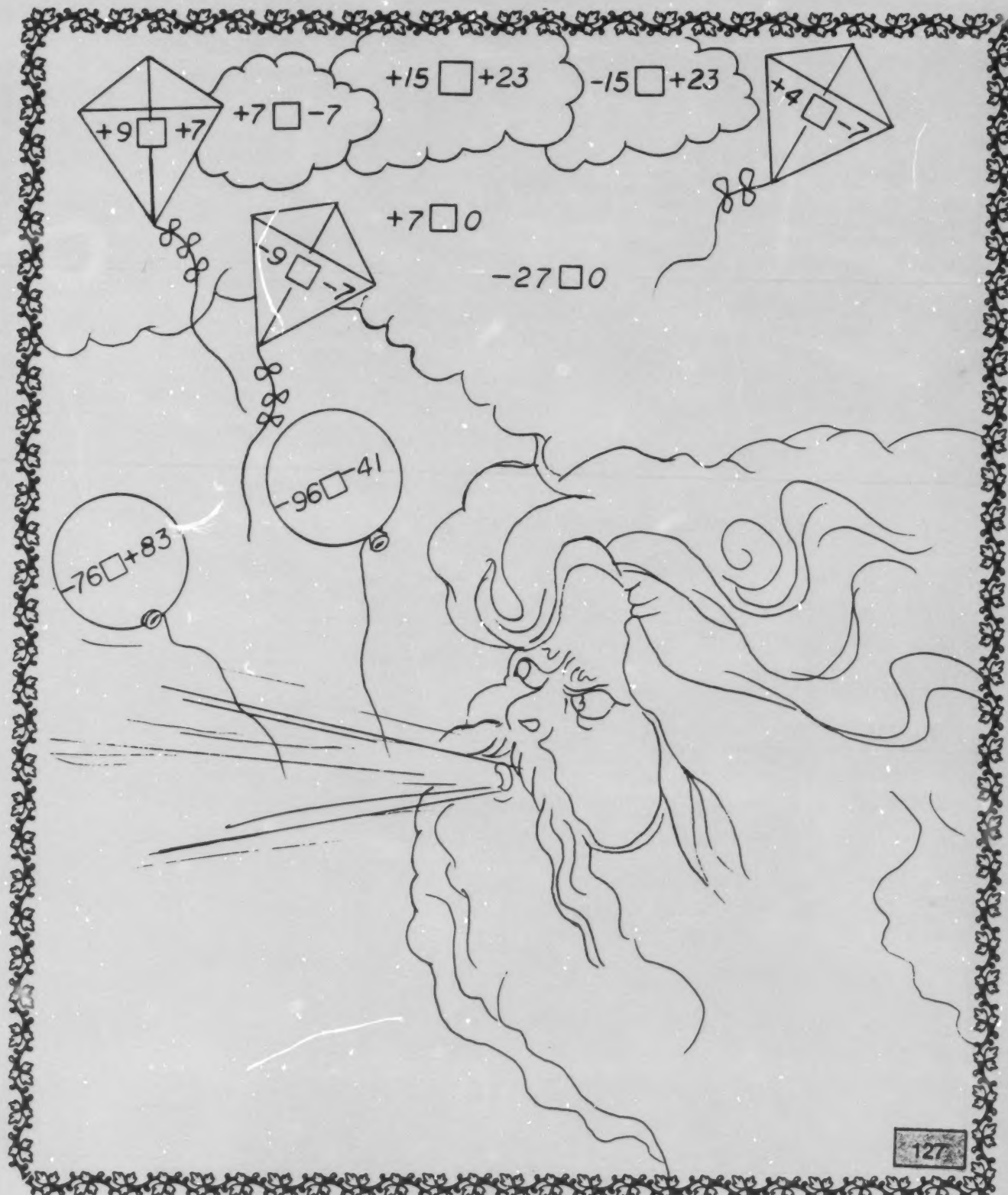
f) - 17 _____

l) - 2 _____

r) + 2 _____

NAME: _____ CLASS: _____ DATE: _____

Replace each $\square$ with $>$ or $<$.



NAME: _____ CLASS: _____ DATE: _____

Order each set in increasing order

$\{+3, -1, 0, -3\}$

↑

$\{-9, +9, -1, +6, +2\}$

↑

$\{+13, -23, +6, 0, -20\}$

↑

$\{-31, -16, -12, -27, 0\}$

↑

Order each set in decreasing order

$\{+7, +2, -1, +3, +5\}$

↓

$\{-3, +1, 0, +6, -2\}$

↓

$\{-13, +13, +6, -6, +1\}$

↓

$\{0, +17, -26, -38, +15\}$

↓

NAME: _____ CLASS: _____ DATE: _____

Solve each problem.



1. At 6:30 A.M. the temperature was 6° below zero. the temperature rose 9° by 2:00 P.M. What was the temperature at 2:00 P.M.?

2. Scores in Darts

Agnes - 8
 Tawana + 16
 Carlos + 8
 Tyrone - 3

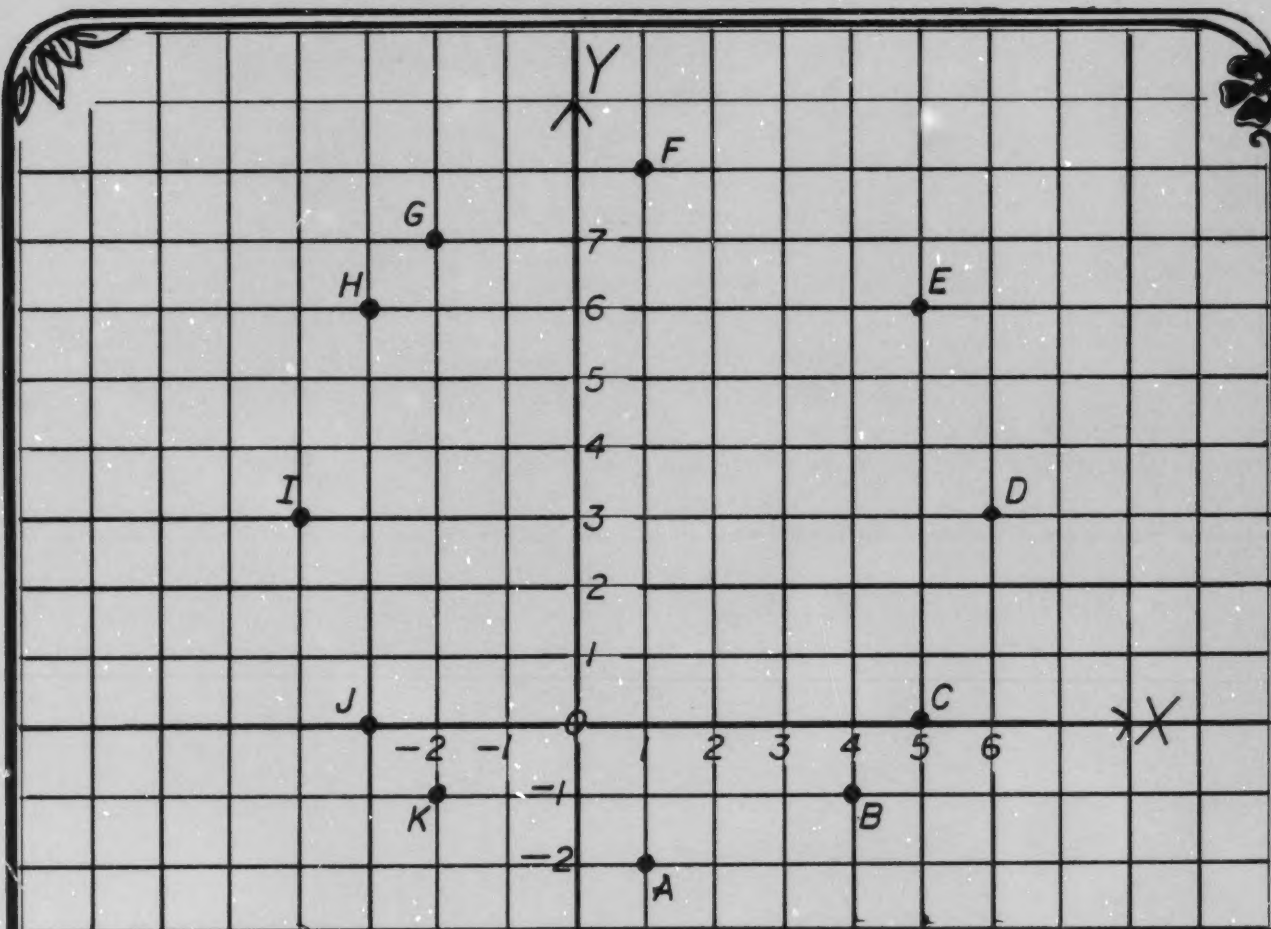
Order the scores from highest to lowest.

3. Circle the greater weight loss in each pair.

	1st Week	2nd Week	3rd Week	4th Week
Hal	- 6 lb	- 3 lb	0 lb	+ 2 lb.
Alice	+ 2 lb	- 2 lb	- 4 lb	+ 1 lb.



NAME: _____ CLASS: _____ DATE: _____

Name the coordinates in the space below.
Connect the dots.

A. _____

E. _____

I. _____

B. _____

F. _____

J. _____

C. _____

G. _____

K. _____

D. _____

H. _____

NAME: _____

CLASS: _____

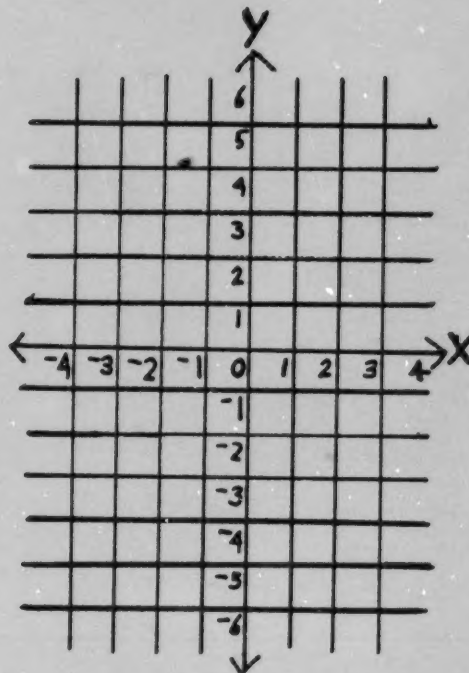
DATE: _____

Locate each of the 5 points on the graph provided.

Which of the 5 points is "out-of-line"?

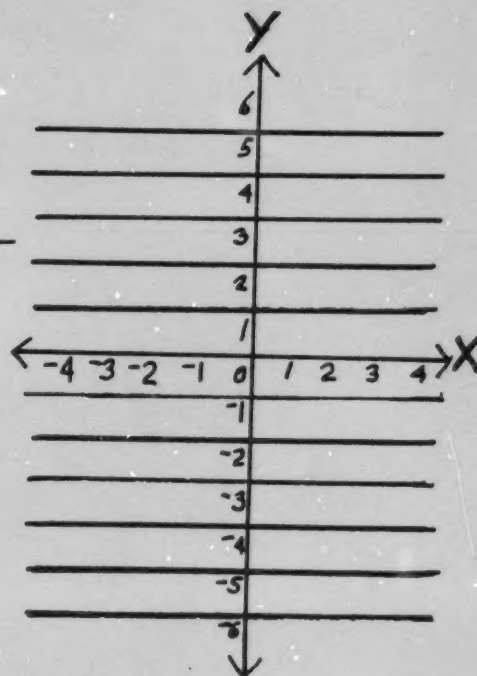
3. (0,2) (1,3) (3,4) (-1,1) (-2,0)

Point not in line _____

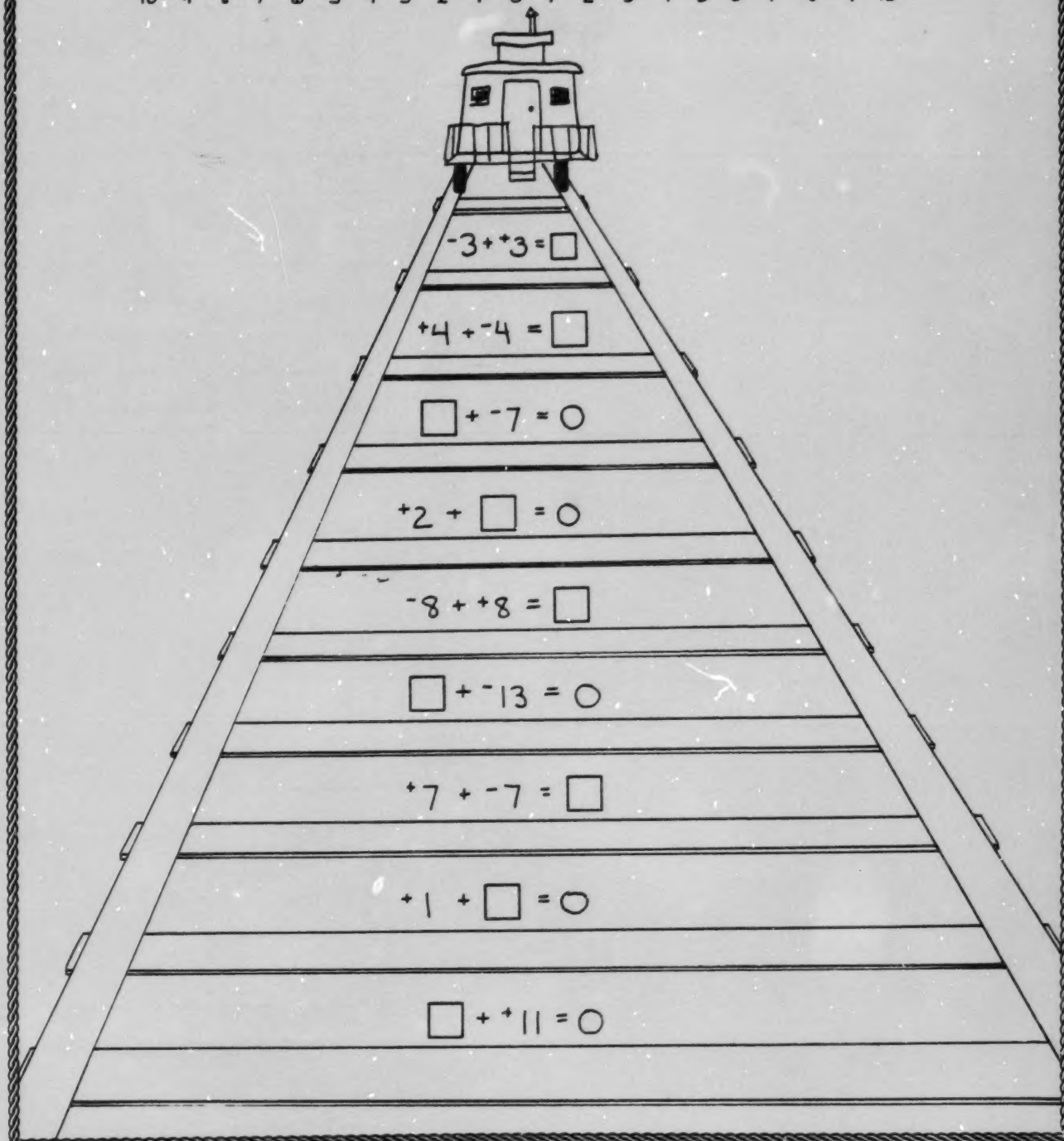
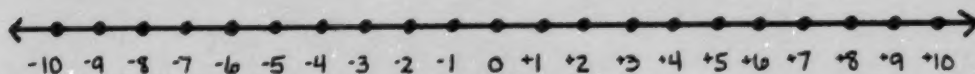


4. (0,1) (1,1) (3,2) (-1,-2) (-2,-3)

(2,-3) Point not in line _____



NAME: _____ CLASS: _____ DATE: _____
 Use your number line to help you find the missing number.



NAME: _____ CLASS: _____ DATE: _____

Complete each number sentence.

① $+4 + +8 = \square$

② $+9 + +6 = \square$

③ $+8 + +13 = \square$

④ $+14 + +30 = \square$

⑤ $+15 + \square = +45$

⑥ $+43 + \square = +62$

⑦ $\square + +3 = +19$

⑧ $\square + +15 = +24$

⑨ $+17 + +18 = \square$

⑩ $+13 + \square = +14$



NAME: _____ CLASS: _____ DATE: _____

Find the missing numeral.



1. $-8 + -16 = \square$

7. $-3 + -9 = \square$

2. $-2 + -11 = \square$

8. $\square + -9 = -11$

3. $-17 + -18 = \square$

9. $\square + -15 = -23$

4. $-18 + -17 = \square$

10. $-17 + \square = -21$

5. $-1 + -9 = \square$

11. $-13 + \square = -30$

6. $-11 + -2 = \square$

12. $-19 + -37 = \square$

NAME: _____ CLASS: _____ DATE: _____

Complete the chart.

III.

Directions: Mrs. Smith has just moved to 54th Street. Mr. Brown, the postman, will now be delivering Mrs. Smith's mail. Mrs. Smith has a budget to keep track of and now she has a balance of zero. What will be Mrs. Smith's budget balance after the 16th day of mail delivery.



	Mrs. Smith's balance	Mrs. Smith was delivered a:	Number Sentence
1st day	0	check for \$25	$0 + (+ 25) = 25$
2nd day	\$25	check for \$15	
3rd day	\$40	bill for \$18	
4th day		bill for \$25	
5th day	\$-3	bill for \$10	
6th day		check for \$5	
7th day		check for \$19	
8th day		bill for \$7	
9th day		check for \$7	
10th day		check for \$2	
11th day		check for \$15	
12th day		bill for \$8	
13th day		bill for \$2	
14th day		check for \$1	
15th day		bill for \$25	
16th day		check for \$7	

NAME: _____ CLASS: _____ DATE: _____

Write the number sentence and solve.

1. Example - The temperature was $^{\circ}7$ above zero at noon. It fell 13° by midnight. What was the new temperature?
 $(+7) + (-13) = -6^{\circ}$



2. Agnes snapped a picture of the runners 5 seconds before the race started. She took another picture 3 seconds after the race started. How many seconds passed between the two snapshots?



3. In one days trading a certain stock opened at \$23. It closed \$2.00 lower. What was the closing price?



4. On January 1, Mr. Cooper had \$389 in his savings account. During the month he made withdrawals of \$150 and \$265 and made a deposit of \$300. What was the balance on January 31?



5. Mrs. Jones lost 4 kg in May. She lost 3kg in June. What was her total gain or loss?



NAME: _____ CLASS: _____ DATE: _____

Solve each equation by substituting values for X and Y.

1.

$$3X - 1 = Y$$

X	Y
6	17

2.

$$X + 12 = Y$$

X	Y
7	19

3.

$$X - 3 + = - Y$$

X	Y
1	-2

4.

$$4X - 5 = Y$$

X	Y
3	7

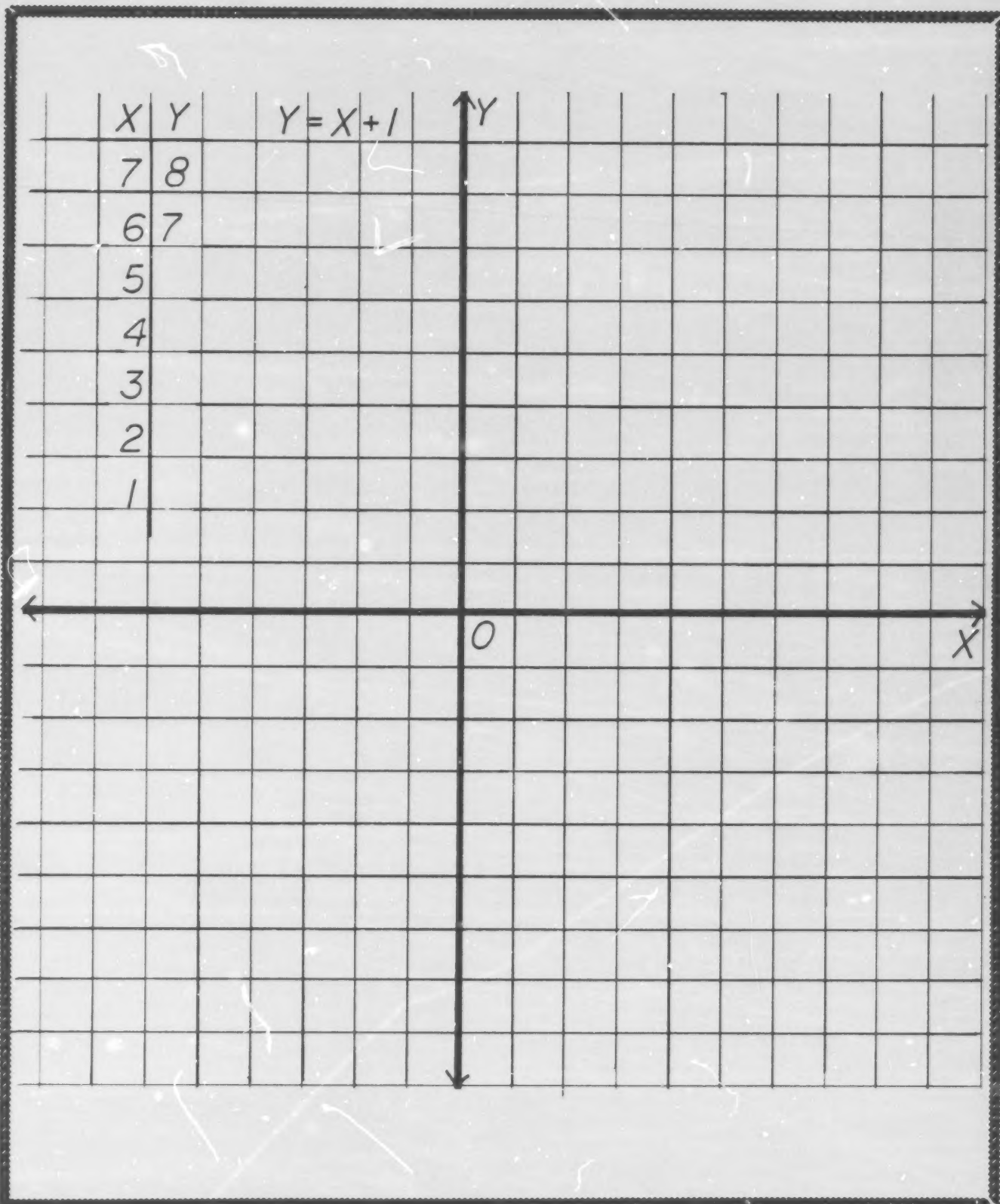
5.

$$-X + 7 = -Y$$

X	Y
-12	-5

NAME: _____ CLASS: _____ DATE: _____

I. Find the missing number and graph the solution pairs.



NAME: _____

CLASS: _____

DATE: _____

The correct answer to each problem below is hidden in the treasure chest. The answers run either down or across. Complete each problem, find the product in the treasure chest and circle it.

$$\begin{array}{r} 5916 \\ \times 3251 \\ \hline \end{array}$$

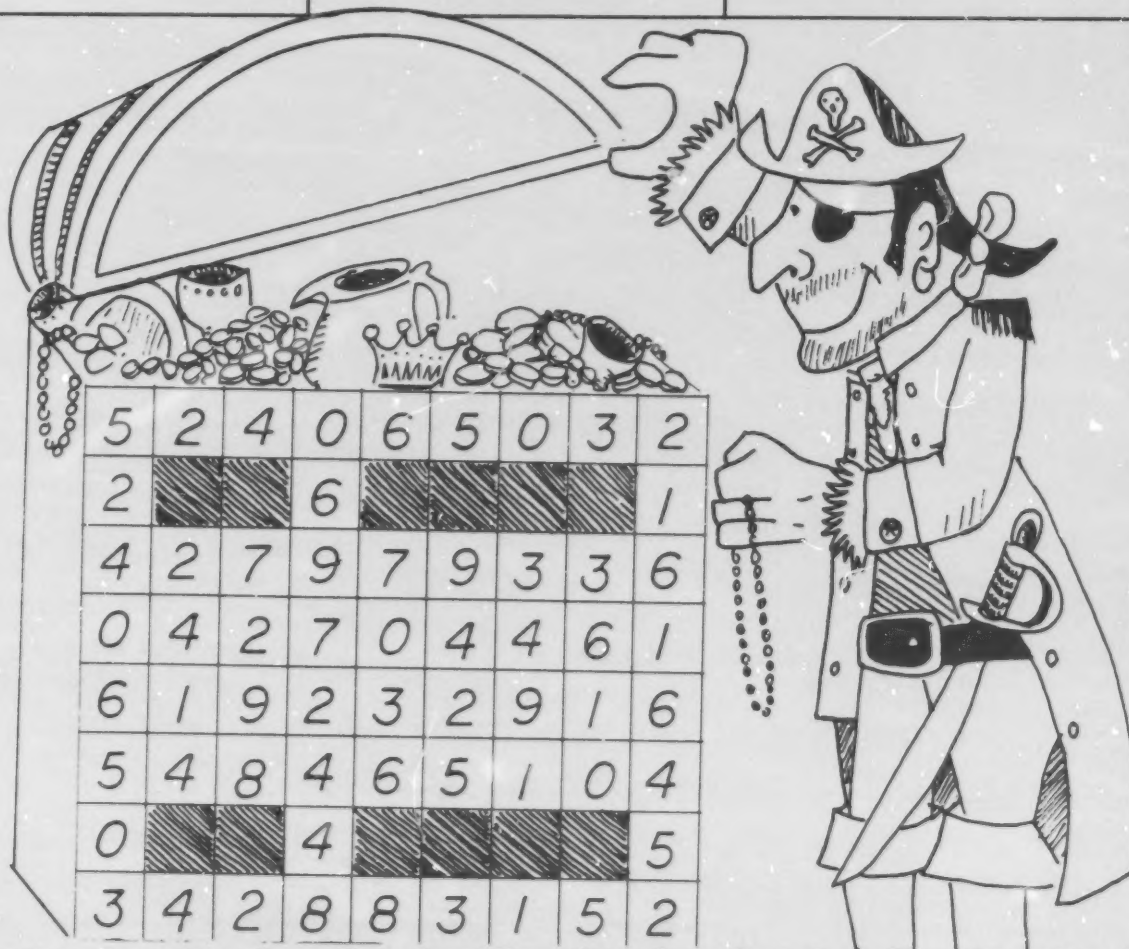
$$\begin{array}{r} 3428 \\ \times 8162 \\ \hline \end{array}$$

$$\begin{array}{r} 3541 \\ \times 1206 \\ \hline \end{array}$$

$$\begin{array}{r} 7293 \\ \times 2964 \\ \hline \end{array}$$

$$\begin{array}{r} 7234 \\ \times 5928 \\ \hline \end{array}$$

$$\begin{array}{r} 8341 \\ \times 6283 \\ \hline \end{array}$$



NAME: _____ CLASS: _____ DATE: _____

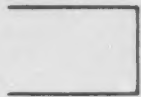
Solve each problem.

- 1) 1,125 cases of pencils were loaded on a truck. There were 2,100 pencils to a case. How many pencils were on the truck?
- 2) The distance from New York to San Francisco is 2,574 miles. Last year 1,350 planes made the trip one-way. What was the total number of miles traveled for all the planes?
- 3) There are 1,440 minutes in one day. How many minutes are there in 3 years?
- 4) There are 3,600 seconds in one hour and 168 hours in one week. How many seconds are there in one week?

NAME: _____ CLASS: _____ DATE: _____

Discover the code. Divide the smaller number into the larger number and write the quotient on the blank line.

 604 20531 8032 1 591		
	7065	
4018	8074	105
	10097	
325		295
251	18,200	28,036

1.  ÷  = _____ 5.  ÷  = _____

2.  ÷  = _____ 6.  ÷  = _____

3.  ÷  = _____ 7.  ÷  = _____

4.  ÷  = _____ 8.  ÷  = _____

NAME: _____ CLASS: _____ DATE: _____
 Connect the dots in the order of the quotients given.

① $4921 \overline{)35927}$

⑤ $3110 \overline{)68421}$

② $5210 \overline{)67817}$

⑥ $2211 \overline{)26635}$

③ $4580 \overline{)36782}$

⑦ $2250 \overline{)13625}$

④ $1487 \overline{)48000}$

⑧ $7368 \overline{)752186}$

⑨ $5317 \overline{)16436}$

3r485

7r1480

102r650

6r125

22r1

12r103

32r416

8r142

13r204

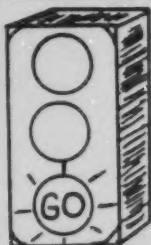
142

NAME: _____ CLASS: _____ DATE: _____

Read each problem. Determine the operation.

Estimate the answer.

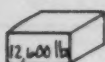
Solve the problem and check your answer.



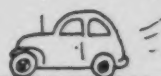
1. An orange grove produces 134,000 oranges. If a crate holds 92 oranges, how many crates are needed?



2. There are 168 hours in one week. How many whole weeks are there in 9,216 hours? How many hours are leftover?



3. A 12,600 pound shipment consists of cases weighing 56 pounds each. How many cases are in a shipment?



4. The Gonzalez family drove 1,760 kilometers in 22 hours. What was their average speed?



5. Yesterday the light bulb factory produced 68,020 bulbs. They are packed 24 to a case. How many cases can be filled?
How many light bulbs would be left over?



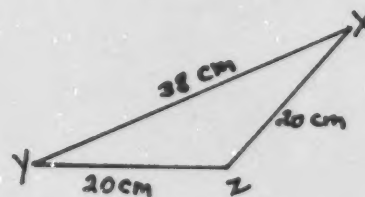
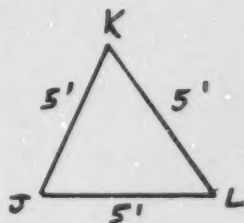
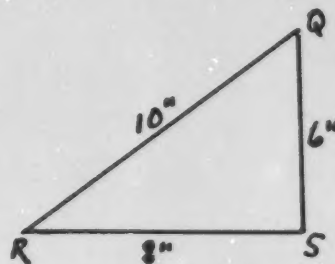
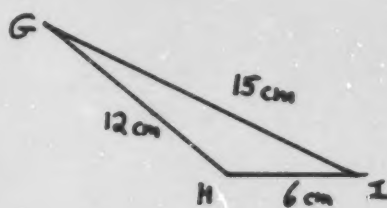
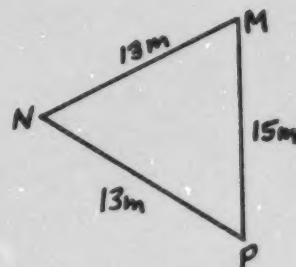
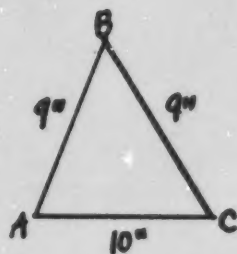
6. George Blanda scored 2,002 points during his 26 season football career. How many points did he average each season?



P.O. 6.09.02.01

NAME: _____ CLASS: _____ DATE: _____

Classify each triangle according to its sides.

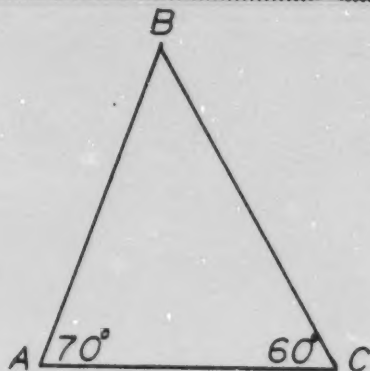


NAME: _____

CLASS: _____

DATE: _____

Find the measure of the missing angle using a protractor. Then find the sum of the angles of each triangle.

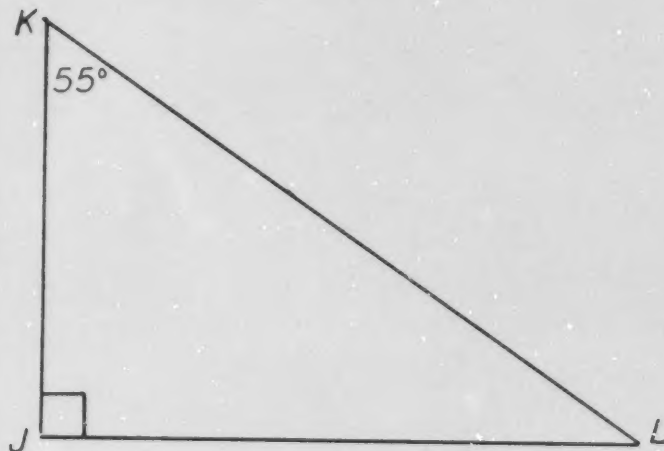
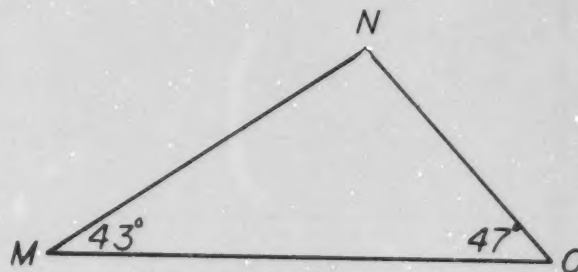
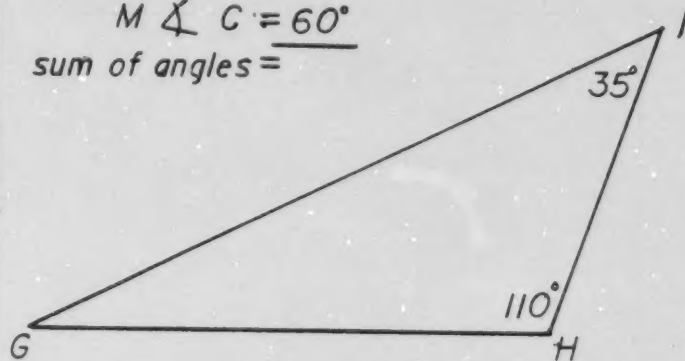
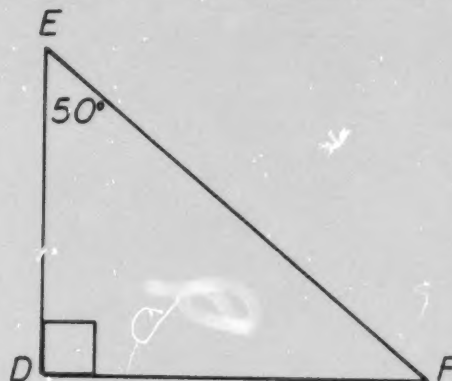


$$m\angle B = \square$$

$$m\angle A = 70^\circ$$

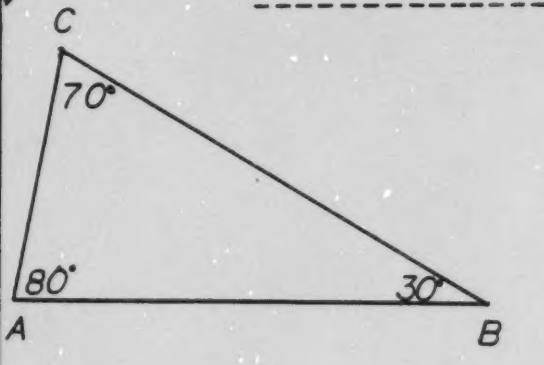
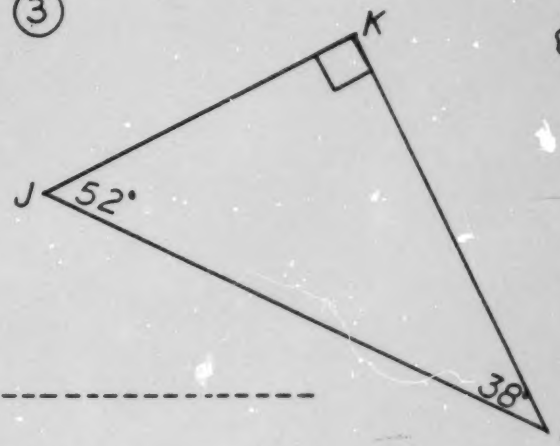
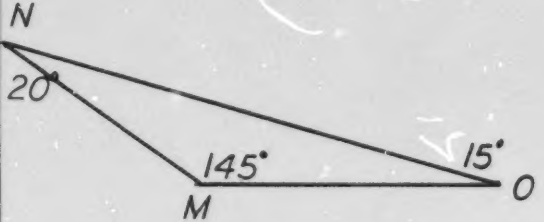
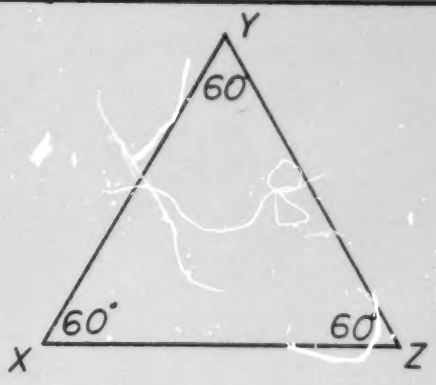
$$m\angle C = 60^\circ$$

sum of angles = _____



NAME: _____ CLASS: _____ DATE: _____

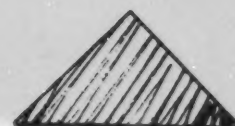
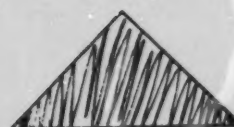
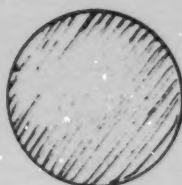
- I. Classify each triangle according to its angles.
- II. Using a compass and a straight, edge, construct these triangles.

① I. _____ 	③ 
② _____ 	④ 

- II. A triangle with one side 4 inches and the other two sides $2\frac{1}{2}$ inches long.

NAME: _____ CLASS: _____ DATE: _____

Use the pictures to answer the questions.



What is the ratio of:

1. circles to triangles
2. shaded figures to unshaded figures.
3. unshaded figures to shaded figures.
4. total figures to circles.
5. shaded circles to all circles
6. all circles to shaded circles
7. shaded figures to total
8. shaded triangles to total

NAME: _____ CLASS: _____ DATE: _____

Use the graph below to name the given ratio. If an equivalent ratio can be written in lower terms, do so.

Circles ○○○○○○

Triangles △△△△△△△

Squares □□□□

Parallelograms ▱▱▱

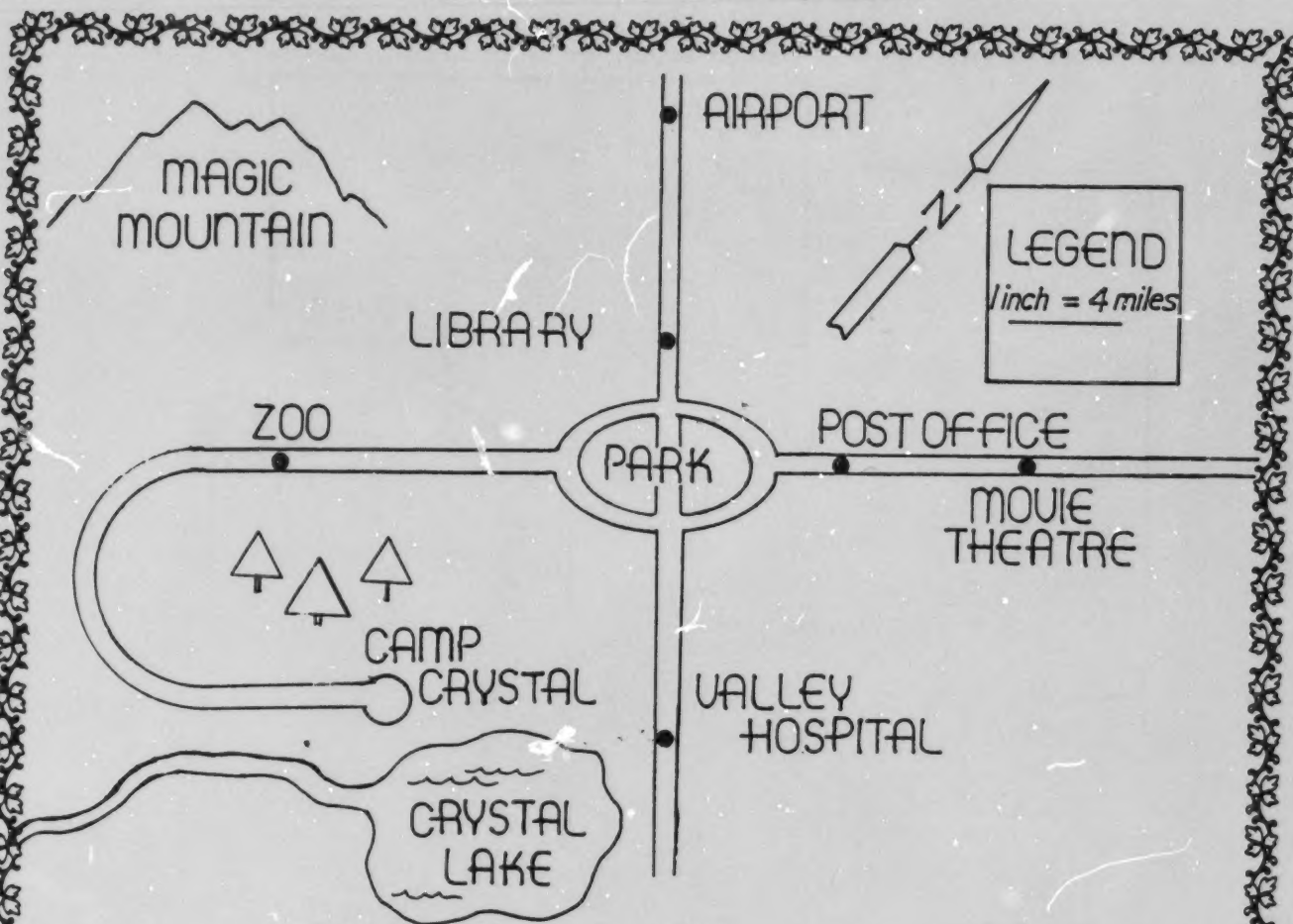
1. circles to triangles
2. circles to squares
3. parallelograms to circles
4. four-sided figures to total figures
5. squares to triangles
6. squares to circles
7. circles to total figures



NAME: _____ CLASS: _____ DATE: _____

Study this map.

How many miles are there between these places?



Complete the chart.

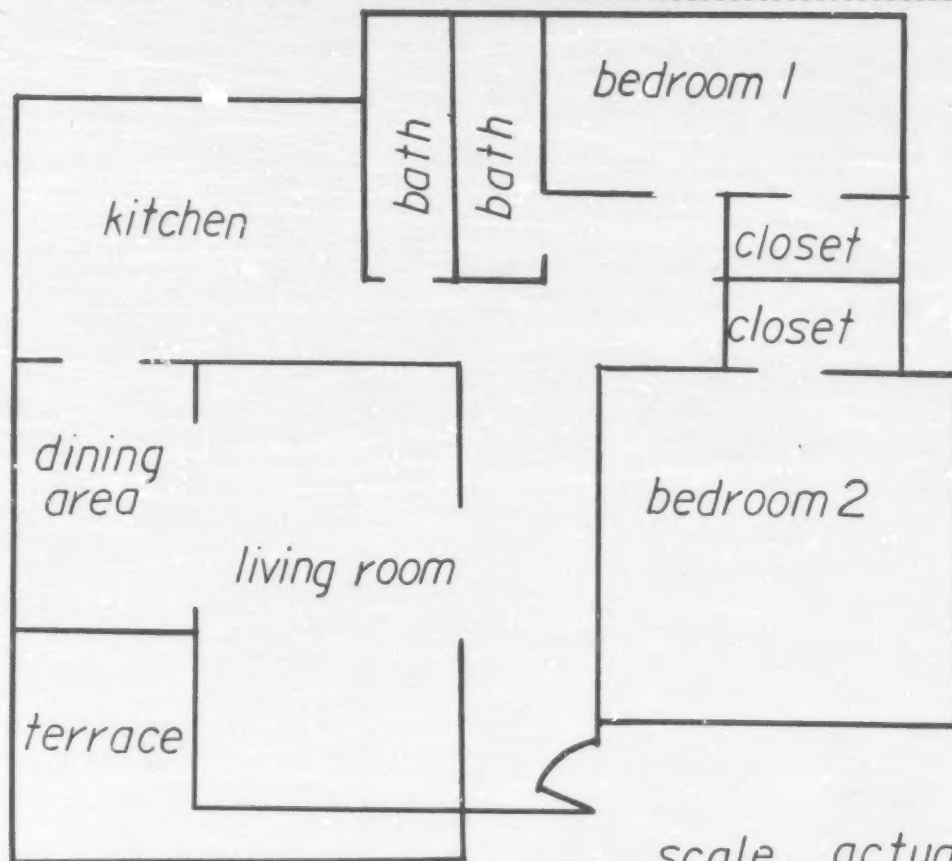
- (a) the park and the zoo?
- (b) the post office and the movie theatre?
- (c) the hospital and the library?
- (d) the library and the airport?
- (e) the airport and the hospital?

Inches	Miles

NAME: _____ CLASS: _____ DATE: _____

This is a scale drawing of the floor plan of a house.

$\frac{1}{4}$ inch on this drawing is the same as 3 feet in the actual house.



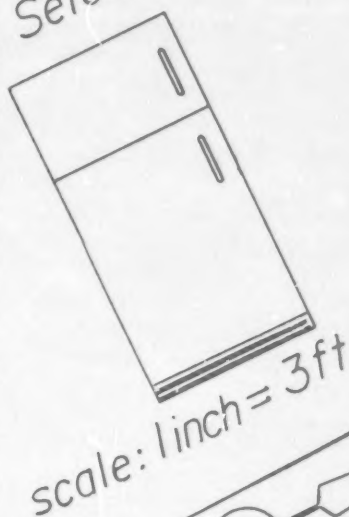
scale actual
drawing size

Length of dining area _____
 Width of dining area _____
 Length of kitchen _____
 Width of kitchen _____
 Length of living room _____
 Width of living room _____
 Length of bedroom 1 _____
 Width of bedroom 1 _____
 Length of bedroom 2 _____
 Width of bedroom 2 _____

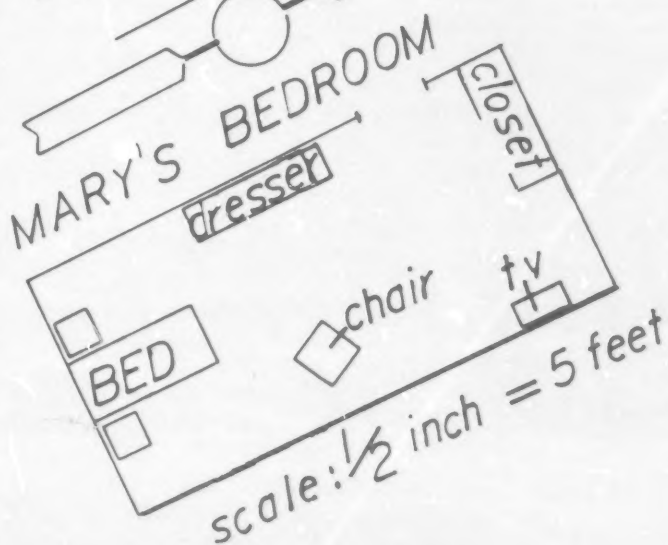
3 in.	18 ft.

NAME: _____ CLASS: _____ DATE: _____

Make a scale drawing
of any three household objects.
Select an appropriate scale.



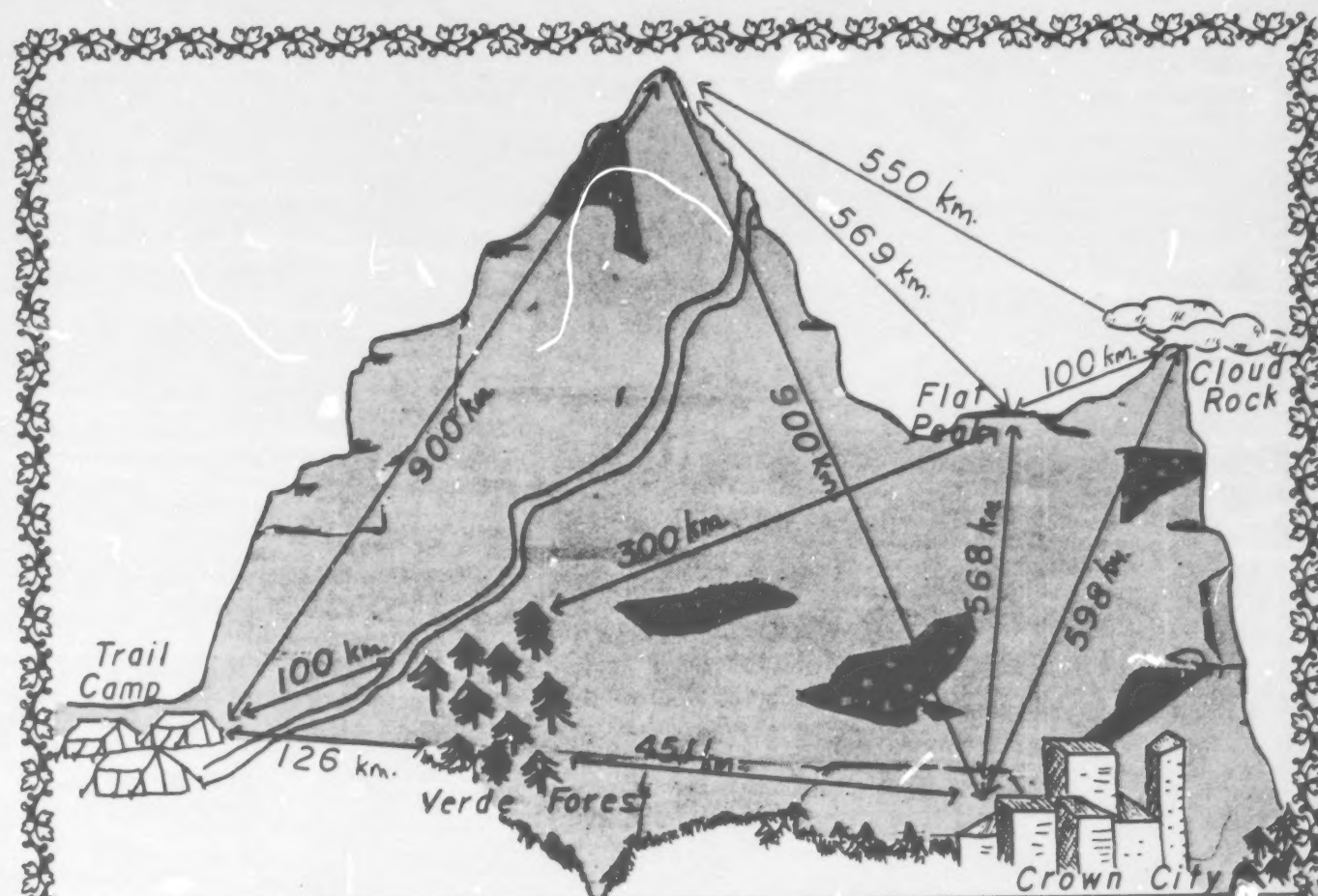
Make a scale drawing of your
bedroom. Select an appropriate
scale.



NAME: _____

CLASS: _____

DATE: _____



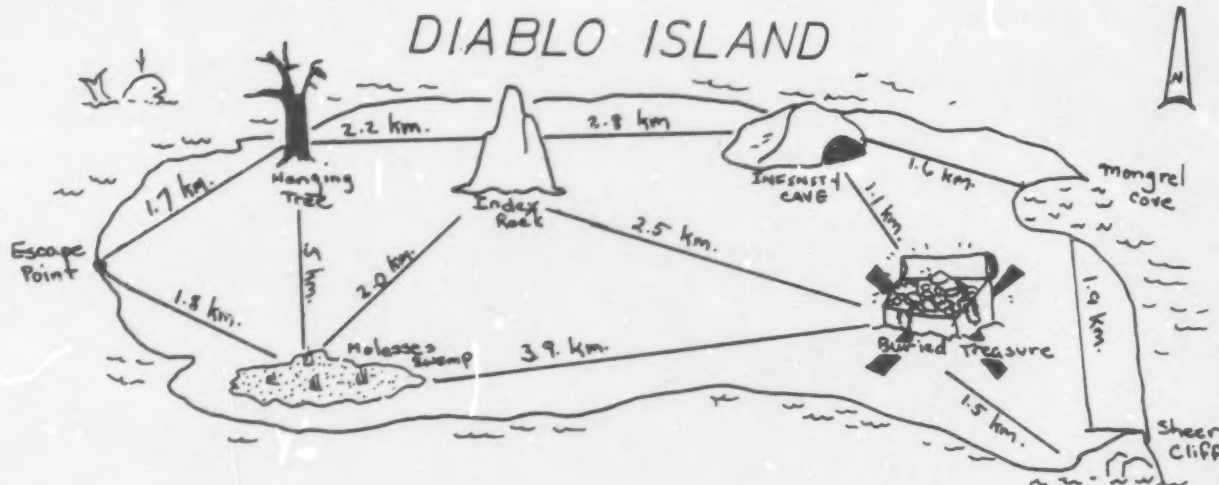
Study the map. Determine the total distance between the following landmarks:

- Crown City to Moon Peak to Cloud Rock. _____
- Verde Forest to Trail Camp to Moon Peak. _____
- Trail camp to Flat Peak to Crown City. _____
- Crown City to Trail Camp to Flat Peak to Crown City. _____
- Crown City to Cloud Rock to Flat Peak to Trail Camp. _____
- Find the shortest route to Moon Peak from Verde Forest. _____
- Find the shortest route to Crown City from Trail Camp. _____
- What is the shortest round-trip distance from Crown City stopping at each of the three mountains on the map? _____

NAME: _____ CLASS: _____ DATE: _____

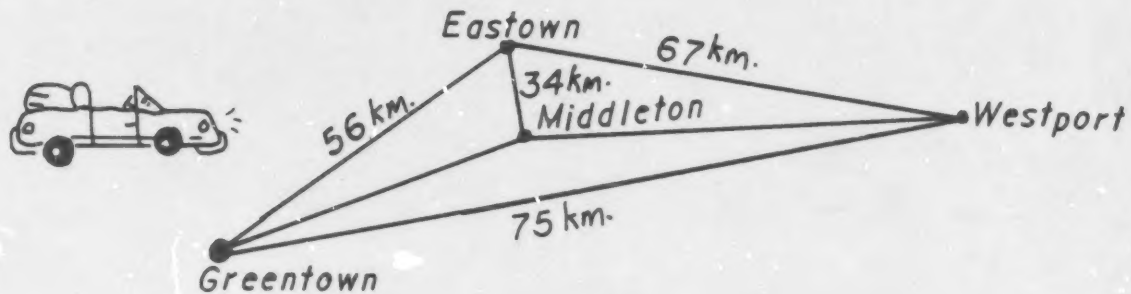
Follow directions.

- B. Imagine yourself as a clever pirate. You have buried a chest of gems and gold somewhere on Diablo Island. You are the only one who has the map. But you do not want to dig up the treasure yourself. Write directions for a treasure hunt, trying to tire the hunters so that you can easily take the found treasure from them. What question(s) would you ask to help direct someone to the treasure?



NAME: _____ CLASS: _____ DATE: _____

A) Imagine yourself as a traveling salesperson. Study the map. Create a word problem using this map. Then, show your solution in the box.



Word story:

Solution:

NAME: _____

CLASS: _____

DATE: _____

Use the commutative property to find N. Then write the word for that problem above its answer on the bottom of the page.

Question: Why wouldn't the sailors play cards aboard ship?

ON $(\frac{2}{3} \times \frac{5}{6}) \times 1\frac{1}{2} = (\frac{5}{6} \times N) \times 1\frac{1}{2}$

CAPTAIN $(\frac{3}{5} \times (\frac{2}{3} \times \frac{1}{2})) = \frac{3}{5} \times (N \times \frac{2}{3})$

DECK $\frac{5}{6} \times \frac{3}{5} = \frac{3}{5} \times N$

THE $\frac{3}{5} \times (\frac{1}{10} \times \frac{3}{7} \times N)$

STANDING $\frac{2}{3} \times \frac{3}{5} = N \times \frac{2}{3}$

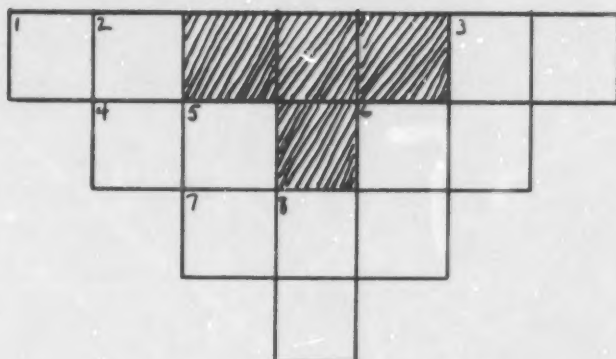
WAS $2\frac{1}{2} \times \frac{3}{4} = N \times 2\frac{1}{2}$

ALWAYS $6\frac{1}{2} \times \frac{1}{3} = N \times 6\frac{1}{2}$



NAME: _____ CLASS: _____ DATE: _____

Use the distributive property to answer the questions mentally.
Then fill in the puzzle.

Across

1. $8 \times (1 + \frac{1}{2})$

3. $5 \times (2 + \frac{1}{5})$

4. $8 \times (5 + \frac{1}{4})$

6. $5 \times (6 + \frac{3}{5})$

7. $12 \times (9 + \frac{7}{12})$

Down

2. $15 \times (1 + \frac{3}{5})$

3. $6 \times (2 + \frac{1}{6})$

5. $9 \times (2 + \frac{1}{3})$

6. $6 \times (5 + \frac{5}{6})$

8. $10 \times (1 + \frac{4}{5})$

NAME: _____ CLASS: _____ DATE: _____

First estimate the product in each problem.
Then solve.

Gravity on the moon is $\frac{1}{6}$ that of Earth.

People can jump six times as far on the Moon, as they can on earth. Gravity on mars is $\frac{2}{5}$ that of the Earth. People can jump $\frac{5}{2}$ or $2\frac{1}{2}$ times farther on Mars then on Earth.

1. Alex can broad jump $3\frac{1}{2}$ feet on Earth.

How far can he jump on the Moon?

How far can he jump on Mars?

2. Luke can hurdle over a $4\frac{1}{4}$ foot fence on Earth. How high can he hurdle on Mars?

3. Monique can jump over a $3\frac{1}{3}$ foot bar on Earth.

How high can she jump on the Moon?

How high on Mars?

NAME: _____ CLASS: _____ DATE: _____

Be a division detective and tell whether each division answer is greater than or less than one.

1. $\frac{1}{6} \div \frac{1}{2}$

4. $\frac{3}{4} \div \frac{1}{2}$

2. $\frac{14}{15} \div \frac{4}{5}$

5. $\frac{1}{3} \div \frac{3}{4}$

3. $\frac{9}{16} \div \frac{7}{12}$

6. $\frac{3}{8} \div \frac{7}{16}$



NAME: _____ CLASS: _____ DATE: _____

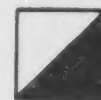
Divide. Write each answer in lowest terms.

Find your answer below and shade it as shown. When you are finished, give yourself a check plus.

1. $\frac{5}{8} \div \frac{3}{4}$



7. $\frac{3}{4} \div \frac{1}{4}$



2. $\frac{2}{3} \div \frac{1}{4}$



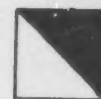
8. $\frac{3}{5} \div \frac{2}{3}$



3. $\frac{7}{8} \div \frac{3}{4}$



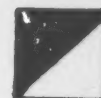
9. $\frac{2}{3} \div \frac{2}{3}$



4. $\frac{4}{9} \div \frac{2}{3}$



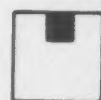
10. $\frac{5}{6} \div \frac{2}{3}$



5. $\frac{3}{4} \div \frac{1}{2}$



11. $\frac{2}{3} \div \frac{3}{4}$



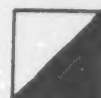
6. $\frac{1}{4} \div \frac{1}{3}$



12. $\frac{1}{3} \div \frac{3}{4}$



13. $\frac{1}{8} \div \frac{3}{4}$



$\frac{1}{3}$	$\frac{4}{9}$	$\frac{1}{4}$	$\frac{9}{10}$	$\frac{1}{6}$	$\frac{3}{5}$
$\frac{1}{9}$	$\frac{4}{5}$	$\frac{5}{6}$	$\frac{1}{4}$	$\frac{3}{4}$	$\frac{1}{5}$
$\frac{2}{3}$	3	$\frac{5}{6}$	$2\frac{2}{3}$	$\frac{4}{9}$	$\frac{1}{2}$
1	$\frac{1}{6}$	$\frac{2}{5}$	$\frac{7}{9}$	$\frac{8}{9}$	$\frac{3}{4}$

NAME: _____ CLASS: _____ DATE: _____

To find the answer, divide and express your answer in lowest terms. Write the letter above the answer below.

What did the balloonist say at the beginning of the Trans-Atlantic race?

B. $2 \frac{2}{5} \div \frac{2}{5}$

E. $2 \frac{1}{2} \div \frac{1}{2}$

O. $1 \frac{3}{5} \div \frac{2}{5}$

P. $1 \frac{2}{5} \div \frac{7}{10}$

R. $2 \frac{3}{4} \div \frac{1}{4}$

S. $5 \frac{1}{4} \div \frac{3}{4}$

T. $7 \frac{1}{2} \div \frac{5}{6}$

U. $2 \frac{1}{4} \div \frac{3}{4}$

5 3 11 4 2 5

4 11 6 3 7 9



NAME: _____ CLASS: _____ DATE: _____

In quotientville all the addresses are fractions. Solve each example in lowest terms.
Draw a line from each person's name to their house.

$$2\frac{1}{4} \div 1\frac{1}{2}$$

RAFAEL



DIVISOR DRIVE



$$8\frac{3}{4} \div 3\frac{1}{3}$$

DORA

NUMERATOR

AVENUE

$$2\frac{3}{16} \div 3\frac{1}{2}$$

MIRIAM



IMPROPER



$$25\frac{1}{2} \div 1\frac{1}{2}$$

ARTIE

PLACE

$$2\frac{1}{2} \div 1\frac{1}{3}$$

ANNA



MIXED NUMBER MALL



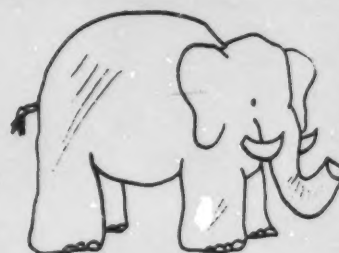
$$2\frac{1}{3} \div 1\frac{1}{5}$$

STEVEN

NAME: _____ CLASS: _____ DATE: _____

Solve each problem.

1. A herd of elephants walks $\frac{3}{5}$ of a mile each hour. How many hours will it take a herd to walk $6\frac{3}{4}$ miles?



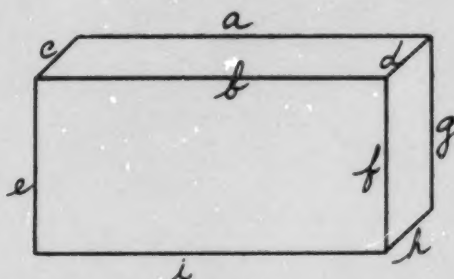
2. A kilometer is about $\frac{5}{8}$ of a mile. If a herd walked $10\frac{1}{2}$ miles how many kilometers did they walk?

3. A herd walked $40\frac{1}{2}$ miles at a speed of $4\frac{1}{2}$ miles per day. How many days did it take the herd to walk that distance?



4. Another herd walked $3\frac{1}{2}$ days. How many miles per day did they walk on the average?

Identify as intersecting, parallel or skew lines.



intersecting
parallel
skew



1. Lines a and b are _____.
2. Lines a and c are _____.
3. Lines a and h are _____.
4. Lines f and g are _____.
5. Lines f and d are _____.
6. Name a pair of parallel lines not named above _____.
7. Name a pair of intersecting lines not named above _____.
8. Name a pair of skew lines not named above _____.
9. Do parallel lines always lie in a plane? _____
10. Do skew lines ever lie in a plane? _____



NAME: _____ CLASS: _____ DATE: _____

Draw a diagram showing the three possible positions for a line and a plane in space. Identify each item as a line and plane that intersect, are parallel or as a line contained in a plane.

Draw:A line contained
in a planeA line parallel
to a planeA line intersecting
a plane

Place each under the correct column.

1. A tree and the ground from which it is growing.
2. The edge of a book.
3. A chalk line on the chalkboard.
4. Electrical wires and the ground.
5. A car wheel and its axle.
6. A line drawn on this paper.

intersecting

parallel

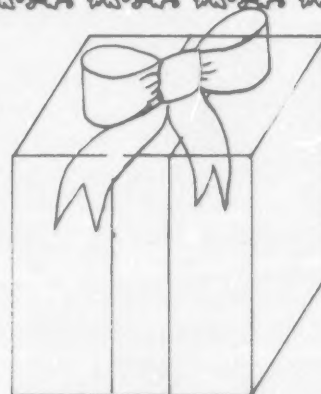
contained in the plane

NAME: _____ CLASS: _____ DATE: _____
 Label each figure plane or solid.

1.



4.



2.



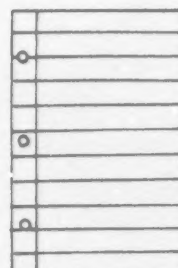
5.



3.



6.



NAME: _____ CLASS: _____ DATE: _____

Identify two faces, two edges and two vertices for each solid figure.

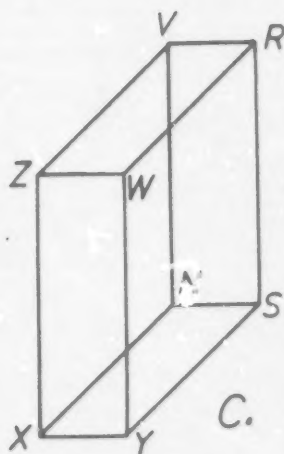
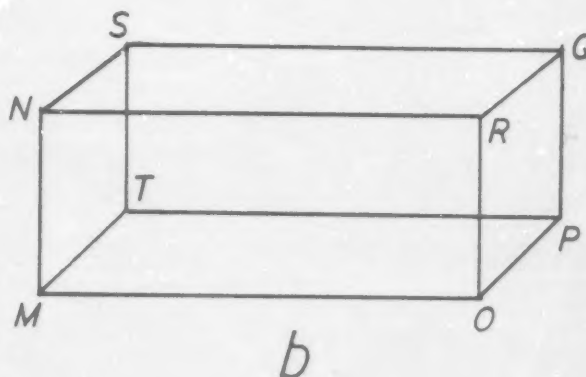
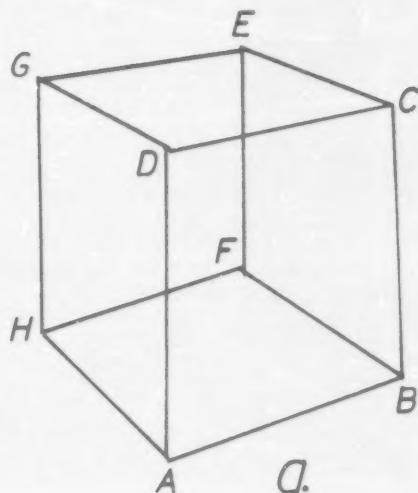


Figure	Faces	Edges
a.		
b.		
c.		

NAME: _____ CLASS: _____ DATE: _____

Use a rectangular prism and a triangular prism made of construction paper. Label the faces. Toss each one ten times and record the base it falls on.

Observe whether any one base occurs most often. Keep a record of the results.

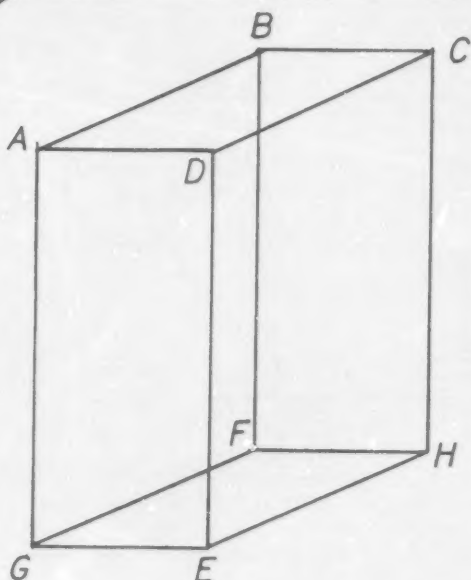
Rectangular Prism

<i>Faces</i>	<i>A</i>	<i>B</i>	<i>C</i>	<i>D</i>	<i>E</i>	<i>F</i>
<i>Base</i>						

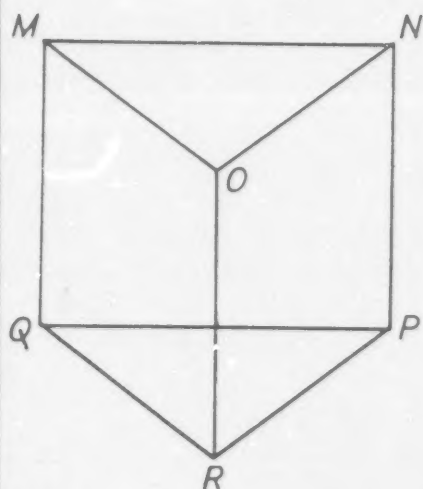
Triangular Prism

<i>Faces</i>	<i>V</i>	<i>W</i>	<i>X</i>	<i>Y</i>	<i>Z</i>
<i>Base</i>					

NAME: _____ CLASS: _____ DATE: _____
 List the vertices, edges and faces for each prism.



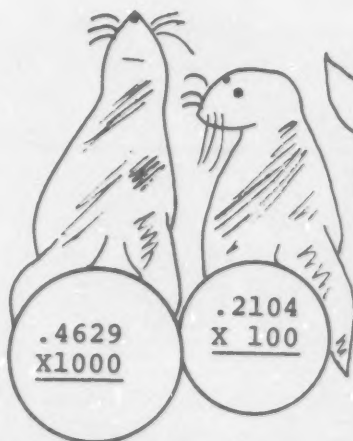
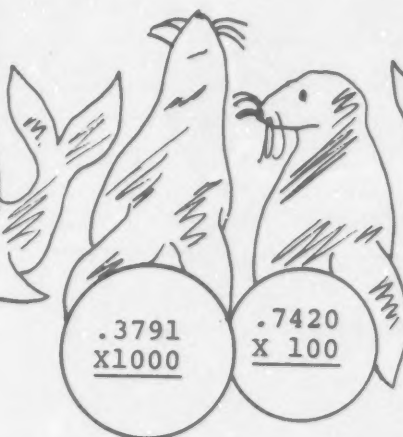
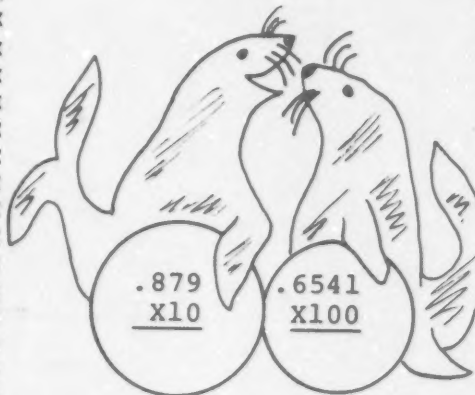
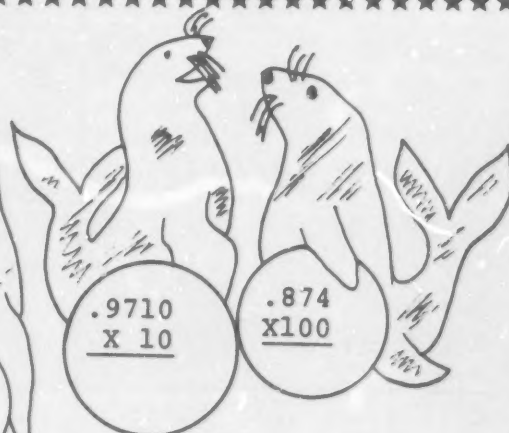
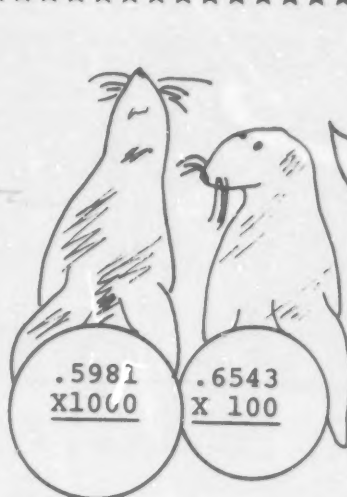
VERTICES	EDGES	FACES



VERTICES	EDGES	FACES

NAME: _____ CLASS: _____ DATE: _____

Solve each problem.



NAME: _____ CLASS: _____ DATE: _____

Solve.

(1) $.3 \times 5 =$

(2) $.022 \times 7 =$

(3) $.007 \times 3 =$

(4) $.612 \times 2 =$

(5) $.62 \times 40 =$

(6) $4.016 \times 20 =$

(7) 1.764×3

(8) $.542 \times 9 =$

(9) $1.06 \times 5 =$

(10) $.82 \times 12 =$

(11) $1.40 \times 10 =$

(12) $3.45 \times 6 =$

NAME: _____ CLASS: _____ DATE: _____

Solve each problem. Circle the number in the tenths place. Use that number in the code grid so that you will get the answer to the question.

What would you have if you dropped your mother's favorite ring into a jar of honey?

- | | | | |
|-----|---------------------|-------|-------|
| 1) | 4.3×2.6 | _____ | _____ |
| 2) | 5.4×7.3 | _____ | _____ |
| 3) | 0.2×2.4 | _____ | _____ |
| 4) | 4.31×0.7 | _____ | _____ |
| 5) | 777×0.001 | _____ | _____ |
| 6) | 9.9×7 | _____ | _____ |
| 7) | 0.86×5.7 | _____ | _____ |
| 8) | 7.3×5.4 | _____ | _____ |
| 9) | 0.7×4.31 | _____ | _____ |
| 10) | 0.6×0.8 | _____ | _____ |
| 11) | 307×0.8 | _____ | _____ |
| 12) | 2.6×4.3 | _____ | _____ |
| 13) | $.4 \times 1.2$ | _____ | _____ |
| 14) | 3017×0.001 | _____ | _____ |
| 15) | 1.44×0.86 | _____ | _____ |
| 16) | 3.5×0.72 | _____ | _____ |

C O D E

A	C	I	X	N	O	S	T	U	Y
11.18	0.777	3.017	69.3	2.52	1.2384	39.42	.48	245.6	4.902

NAME: _____ CLASS: _____ DATE: _____

Use the price of each item to determine the total cost of each person's purchase.

Fresh Fish	
Tomatoes \$.39/lb Bananas \$.19/lb Pears \$.59/lb Garlic \$.89/lb Shrimp \$ 7.95/lb Apples \$.45/lb American Cheese \$ 2.78/lb Cheddar Cheese \$ 2.18/lb	
<u>Carmella's List</u> 3.8 lb cheddar cheese _____ 1.5 lb bananas _____ 1.35 lb American cheese _____ .8 lb tomatoes _____ Total _____	<u>Tyrone's List</u> 6. lb shrimp _____ 1.8 lb tomatoes _____ .6 lb garlic _____ 2 lb bananas _____ Total _____

NAME: _____ CLASS: _____ DATE: _____

Find the unit price for each of the items below.

<u>ITEM</u>	<u>NUMBER</u>	<u>TOTAL COST</u>	<u>COST FOR ONE</u>
 Soap	4 Bars	\$.76	\$.19
 Tomato Juice	6 Cans	\$1.26	_____
 Oranges	8	\$.96	_____
 Paper cups	43	1.35	_____
 Doughnuts	12	3.00	_____
 Soda	2 bottles	1.30	_____

NAME: _____ CLASS: _____ DATE: _____

- I. Which would you multiply the divisor and dividend by?
 II. Solve.

I.			
1)	$2.1 \overline{) 6.384}$	10	100 1000
2)	$0.12 \overline{) 2.40}$	10	100 1000
3)	$1.066 \overline{) 0.98072}$	10	100 1000
4)	$0.14 \overline{) 985.60}$	10	100 1000
II.			
5)	$0.6 \overline{) 1.92}$	6)	$0.3 \overline{) 1.35}$
7)	$.0006 \overline{) 0.0072}$	8)	$0.21 \overline{) 1.092}$
9)	$1.5 \overline{) 4.53}$	10)	$0.36 \overline{) 0.072}$
11)	$.08 \overline{) 28.64}$	12)	$2.3 \overline{) 10.58}$

NAME: _____ CLASS: _____ DATE: _____

Write a number sentence for each word problem.
Solve.

- 1) Marcy had 2.4 liters of milk. She poured the same amount into each of 6 cups. How much milk did she pour in each cup?
- 2) Tracy used 0.377 meters of gold wire to repair 13 necklaces. How much did she use for each necklace?
- 3) Nicole made placements out of cloth that was 12.6 meters long. Each placemat was 0.7 meters long. How many placemats did she make?
- 4) Elaine and seven of her friends held a garage sale. They earned a total of \$198.00. How much is each equal share?
- 5) Eric had a piece of wood that was 3.2m long. She wanted to cut the wood into 0.8m sections to make some shelves. How many sections could Eric cut?



NAME: _____ CLASS: _____ DATE: _____

1. Write the value of each digit next to it in the chart.
2. Use your powers of two to make the best bargain.

1.

				
16	8	4	2	1
2^4	2^3	2^2	2^1	2^0
1 =	0	1 =	0	1 =
	1	0	1	0
1	1	0	1	1
1	0	0	0	1
	1	1	1	1
1	0	1	1	1
1	1	1	0	0
	1	1	1	0
1	0	0	1	1

2.

Dad said that for the next ten weeks you and your brother can choose to have your allowance at 50¢ a week or in powers of 2 beginning with 2^0 for the first week. Complete the chart with powers of 2 to see which is your best choice.

Week	1	$2^0 =$
	2	$2^1 =$
	3	$2^2 =$
	4	$2^3 =$
	5	$=$
	6	$=$
	7	$=$
	8	$=$
	9	$=$
	10	$=$

NAME: _____ CLASS: _____ DATE: _____

Find the base ten equivalent of the base two numerals.

MICKEY MITTEN'S ORDERS

Crates 2^4	Cartons 2^3	Boxes 2^2	Packages 2^1	Single Mittens 2^0	Total Number of Mittens-Base 10
1	1	0	0	1	
	1	1	1	0	
1	0	1	0	1	
1	1	1	0	0	
1	0	0	0	1	
1	1	0	1	1	

Find the base ten equivalent for each base two numeral :

1 =

11 =

101 =

10 =

110 =

1001 =

100 =

1110 =

1010 =

1000 =

1111 =

10101 =



NAME: _____ CLASS: _____ DATE: _____

Match the base ten number with its equivalent base two number.

<u>Base 10</u>	<u>Base 2</u>
1.1. 30 _{ten}	a. 110010 _{two}
2. 17 _{ten}	b. 1010 _{two}
3. 44 _{ten}	c. 101100 _{two}
4. 13 _{ten}	d. 110000 _{two}
5. 50 _{ten}	e. 11110 _{two}
6. 26 _{ten}	f. 1111 _{two}
7. 48 _{ten}	g. 1101 _{two}
8. 10 _{ten}	h. 100011 _{two}
9. 15 _{ten}	i. 10001 _{two}
10. 35 _{ten}	j. 11010 _{two}

NAME: _____

CLASS: _____

DATE: _____

List and count each permutation.



1. In how many different ways can three people pair off to play singles at a tennis court?
2. Find the different arrangements of a 5-digit number if the digits 1, 2, 3, 4 and 5 are used.
3. How many ways are there of arranging the letters in the word "jumbles"?
4. In how many different ways can the four colors black, white, red, green be arranged?



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NAME: _____

CLASS: _____

DATE: _____

Make a tree diagram for each problem. Then use the multiplication principle to check the number of permutations.

1. There are three roads which go from Dodge City to Ghost Town Gulch. There are two roads which go to the Olay Corral. How many ways can a person get from Dodge City to Olay Corral?

2. Maxine has 3 different shirts, four different pairs of pants and two jackets. How many different outfits can Maxine make from her wardrobe?

NAME: _____ CLASS: _____ DATE: _____

List and count the numbers of combinations for each problem.

1. How many different arrangements can be made of 4 coins (a penny, a nickle, a dime, a quarter) if only 2 coins can be selected at a time?
2. How many different arrangements can there be of 5 people seated at a table that only seats two?
3. How many different handshakes will there be if 10 people were to shake hands only once with the same person?
4. How many choices of ice cream flavors could be made for a triple decker ice cream cone from a selection of 6 flavors?
5. How many sums of money can be selected from a penny, a dime, a quarter, a half-dollar and a one dollar bill if only 2 denominations can be selected at a time?
6. How many different committees can be formed from 5 people if 4 people make up 1 committee?